

PLAYING DEFENSE AND OFFENSE:
EMPLOYING RESCUE RESOURCES
AS OFFENSIVE WEAPONS

BY

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About The Author

Major John W. Blumentritt graduated from Angelo State University in 1983, with a degree in Biology, a Texas teaching certificate, and a commission through the Air Force Reserve Officer Training Corps. He received his pilot wings at Fort Rucker, Alabama, in 1985, then qualified in the HH-3E *Jolly Green Giant* combat search and rescue helicopter. He flew the HH-3E *Jolly Green Giant* with the 33rd Aerospace Rescue and Recovery Squadron at Kadena Air Base, Japan, for three years, then transferred to the 71st Air Rescue Squadron, Elmendorf Air Force Base, Alaska, where he served as an instructor pilot and Chief of Safety. Major Blumentritt flew many rescue missions throughout Alaska, and was selected as the 1991 Military Airlift Command Safety Officer of the Year.

Upon the retirement of the HH-3E *Jolly Green Giant* from the US Air Force inventory, he transferred to the 210th Air Rescue Squadron at Kulis Air National Guard Base in Anchorage. There he learned to fly the HH-60G *Pave Hawk* combat search and rescue helicopter. In 1991, Major Blumentritt activated the 66th Rescue Squadron at Nellis Air Force Base, Nevada, the first US Air Force HH-60G *Pave Hawk* combat search and rescue unit in the continental United States. Major Blumentritt again served as the Chief of Safety, and for the second year in a row was selected as the Military Airlift Command Safety Officer of the Year. In January 1993, Major Blumentritt and his

squadron activated the 4412th Rescue Squadron in Kuwait to provide combat search and rescue coverage to aircraft flying over Iraq.

In July 1993, Major Blumentritt transferred to the 56th Air Rescue Squadron, Keflavik Naval Air Station, Iceland. Here he served as a flight commander, instructor pilot, and lastly as the chief of wing standardization and evaluation. He flew many rescue missions in Iceland, earning the 1994 Aviator's Valor Award, Ira C. Eaker Outstanding Airmanship Trophy, and the Mackay Trophy, awarded for the US Air Force's most meritorious flight of the year, for his part in saving six Icelandic sailors from a foundered tugboat.

Major Blumentritt then transferred to the 18th Flight Test Squadron, Air Force Special Operations Command, Hurlburt Field, Florida. Here he directed the testing, development, and validation of rotary-wing tactical maneuvering, authored the *MH-60G Tactical Employment Manual*, and served as an MH-60G *Pave Hawk* instructor pilot with the 55th Special Operations Squadron.

In 1997, Major Blumentritt graduated from the US Naval War College in Newport, Rhode Island, with a Master of Arts Degree in National Security and Strategic Studies. He then reported to Maxwell Air Force Base, Alabama, to attend the School of Advanced Airpower Studies. Upon graduation, with a Master of Airpower Art and Science Degree, he will report to the Pentagon. There he will serve on the air staff, CHECKMATE division, as a strategic air campaign planner.

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associated with academia. Our three children, Chris, Sonja, and Ashley are remarkable because Darlene took the time to develop them that way, despite my frequent absences.

ABSTRACT

Throughout history, conventional combat search and rescue forces within the US Air Force have been marked by a severe lack of capabilities prior to conflict, followed by an effort to rebuild after hostilities break out. This cyclic trend has resulted in the US Air Force being ill prepared to immediately field a robust combat search and rescue force prior to every war in modern US history. In addition, conventional combat search and rescue forces have not been strongly represented during the many smaller-scale contingencies that have characterized the geopolitical environment of the late 20th century. In their place, US leaders have directed special operations forces to perform combat search and rescue in addition to their special operations missions.

In theory, a multifaceted force capable of conducting both these missions effectively would be ideal. In reality though, history documents that US special operations forces have been less than adequately trained, organized, and equipped for this dual-use commitment. Nevertheless, US policy makers tend to regard these assets as “better than nothing”, and thus direct them to provide an *ad hoc* combat search and rescue capability to conventional forces. Meanwhile, dedicated US Air Force combat search and rescue forces tend to perpetually exist in an inauspicious state.

In fact, a recent study suggests that conventional combat search and rescue forces have once again atrophied, prompting US national security decision makers to “do something”. In turn, the Joint Requirements Oversight Council has recently authorized the US Air Force to assess a number of alternatives, in an effort to once again bolster combat search and rescue.

Evidence suggests that this recent interest in combat search and rescue is simply another upswing in its 50-year cyclic history. In fact, history documents that the combat search and rescue philosophy tends to be fiscally popular during transient anomalies, characterized by robust spending, a casualty averse environment, and limited threats that do not seriously threaten US national security. However, when US policy makers meet credible threats, or must contend with tight budgets, they tend to direct their efforts away from this altruistic mission. This has led to a fluctuating combat search and rescue commitment, and thus a decreased capability to consistently save downed pilots and crewmembers.

In contrast, the neoteric forces associated with US Special Operations Command tend to fair better in fiscally constrained environments. This occurs because their modus operandi is more in line with war and airpower theories, as well as basic US Air Force doctrine, principles of war, and tenets of airpower. US leaders may desire a dedicated combat search and rescue force, but they eventually gravitate toward offensive weapons, capable of deterring or destroying an enemy. Forces assigned to special operations provide this benefit, throughout the spectrum of conflict, while conventional combat search and rescue forces do not.

Moreover, a number of senior leaders and academicians believe future adversaries will engage the US during smaller-scale contingencies, and will most likely be armed with weapons of mass destruction. Once these challenges actually threaten US national security, the current anomaly will end. In fact, these national emergencies will prompt US leaders to task their military forces to use their offensive capabilities to attack and extirpate these threats as quickly as possible. Special operations will certainly join this

fight, bringing in their unique offensive, unconventional, and counterproliferation capabilities.

During these challenges, airpower assets will certainly be operating in harm's way, and airmen will desire a viable combat search and rescue capability. However, traditional combat search and rescue forces, operating under a Vietnam-era *modus operandi*, will have little to contribute to national security, and thus their funding and support will reflect accordingly. With history as a guide, leaders will direct special operations forces into their familiar multifaceted role, but yet again without the proper training, organizational structure, or necessary equipment to properly conduct combat search and rescue missions.

This study proposes an alternative which capitalizes on the strengths of these two nominally disparate, but in fact quite complementary missions--special operations and combat search and rescue. By combining these two organizations under Air Force Special Operations Command, US leaders would create a multifaceted force, capable of both special operations and combat search and rescue. This organizational move would break the 50-year combat search and rescue cycle, and better utilize expensive airpower assets and highly trained crews. More importantly, however, it would provide Joint Force Commanders the offensive firepower they require, while at the same time offering a robust capability to recover downed pilots and crewmembers.

Chapter 1

Introduction and Problem Statement

ARS [Air Rescue Service] will be organized, manned, equipped, trained, and deployed to support peacetime air operations. No special units or specially designed aircraft will be provided for the sole purpose of wartime search and rescue. Wartime rescue operations will be dictated by the capabilities of equipment used for peacetime SAR [search and rescue].

— Air Rescue Service Directive
25 September 1958

The Gulf War could not have occurred at a worse time for the Air Rescue Service...

— US Air Force Lieutenant Colonel Joseph J. Falzone
1994 Research Fellow, Headquarters, US Air Force

When many people think of US Air Force combat search and rescue, visions of the Vietnam War, complete with HH-3E *Jolly Green Giant* and HH-53 *Super Jolly Green Giant* helicopters, supported by HC-130 *King Birds* and A1E *Skymasters* come to mind. In fact, during the Vietnam War, the US arguably fielded the finest combat search and rescue force in the world.¹ It was for some, the “golden age of combat search and rescue.”²

As evidenced by the above epigraphs, however, combat search and rescue has not always enjoyed such a magisterial position. In fact, the history of combat search and rescue has been marred by a severe lack of capabilities prior to hostilities, followed by a massive effort to rebuild after hostilities break out. Indeed, US Air Force combat search and rescue forces were ill prepared at the start of the Korean and Vietnam Wars, did not participate in the US interventions in Grenada or Panama, and as Lieutenant Colonel Falzone alludes, were not able to mobilize and deploy for the Gulf War.³

¹ Clarence Hobdy, Jr., “Search and Rescue as an Instrument of National Policy” (Unpublished Research Paper, Auburn University, Alabama, 30 May 1970) 1.

² Greg Alan Caires, “Advanced Aircraft Bolster Search, Rescue Capability”, *National Defense*, February 1999, 28.

³ US Air Force Major (now Lieutenant Colonel) Joseph J. Falzone, *Combat Search and Rescue; CSEL Enhancements for Winning Air Campaigns*, (Alabama: Air University Press, Maxwell Air Force Base, 1997), 55.

Since the US seems to place a high value on the dignity, importance, and worth of individual human life, it seems unthinkable that the Department of Defense would send aircrews into major regional conflicts without a dedicated combat search and rescue force. However, this is exactly what has occurred in the past, and what transpired during the Gulf War. In fact, no US Air Force combat search and rescue aircraft, assigned to the Air Rescue Service, participated in Operation Desert Storm. Instead, US national security decision makers directed that the limited assets assigned to US Special Operations Command provide combat search and rescue, in addition to their core special operations missions. Although they were not trained, organized, or equipped to provide conventional combat search and rescue, Gulf War decision makers regarded them *Mejor Que Nada*.⁴

Unfortunately, a similar condition persists today, and will most likely continue into the future. In fact, a recent study by Veda Incorporated concluded that within conventional US Air Force combat search and rescue forces, “There is insufficient capability to conduct night or weather-hampered combat search and rescue operations in any threat environment, and there is minimal capability to perform in a weapons of mass destruction environment.”⁵ Moreover, this study also asserts, “None of the services, with the exception of US Special Operations Command, provides adequate CSAR [combat search and rescue] coverage for the entire range of their operations.”⁶

The problem is that although US national security decision makers appreciate the utility of a combat search and rescue capability, they are unable to justify it on a cost-benefit basis.⁷ In fact, combat search and rescue tends to be fiscally popular during transient anomalies, characterized by robust spending, a casualty averse environment, or limited threats that do not seriously threaten US national security. However, history demonstrates that

⁴ “Better than nothing” in Spanish. Although this term is unfair to the dedicated professionals who served in the Air Rescue Service during the war, the fact remains that their organization had deteriorated to practically nothing.

⁵ Veda Incorporated, “Combat Search and Rescue Report to the Joint Chiefs of Staff and the Executive Agent for Combat Search and Rescue”, *Combat Search and Rescue Requirements and Capabilities Study*, (Washington D.C.: 10 February 1997) 3.

⁶ Ibid., 17.

when US national security decision makers meet credible threats, or must contend with tight budgets, they tend to direct their efforts away from this altruistic mission. This has led to a fluctuating combat search and rescue commitment, and thus a decreased capability to consistently save downed pilots and crewmembers.

The US Air Force currently finds itself at a crossroad. Once again, conventional combat search and rescue forces have atrophied, requiring national security decision makers to “do something.”⁸ In fact, the Joint Requirements Oversight Council, the Pentagon’s senior weapons requirements board, recently directed the US Air Force to assess potential airframe replacements for both their aging HH-60G *Pave Hawk* fleet and HC-130 refueling tankers. Options under consideration include a service life extension program for current HH-60G *Pave Hawks*, procuring new HH-60G *Pave Hawks*, acquiring non-developmental items, such as 65 CV-22 *Ospreys*, developing an entirely new helicopter, or entry into cooperation programs with other military services and nations on combat search and rescue.⁹

The final decision is of considerable importance to the future of combat search and rescue. Thus, the purpose of this study is to provide comprehensive research justifying and recommending a sixth alternative which capitalizes on the strengths of two nominally disparate, but in fact quite complementary missions--special operations and combat search and rescue. This thought piece will demonstrate that a multifaceted force, capable of conducting both offensive operations as well as combat search and rescue, best meets the challenge of retaining a robust combat search and rescue capability. To illustrate these points, as well as provide a foundation for further analysis and detailed planning, this study will explore a number of areas.

First, this study will begin by assessing combat search and rescue itself, and why it is important to the US Air Force to retain this capability. Next, this study will investigate the tumultuous history of US Air Force combat search

⁷ US Air Force Lieutenant Colonel Bob Hunt, “Combat Search and Rescue: A Future Special Operations Mission?” (Unpublished Research Paper, Air University, Maxwell Air Force Base, Alabama: April 1996), 21.

⁸ US Air Force Lieutenant Colonel Kerry Taylor, as quoted by Caires, 28.

and rescue, with an empathetic focus on national security decision makers and senior leaders. It will then compare combat search and rescue to classical war theory, airpower theory, and US Air Force basic doctrine, thus demonstrating how, in many cases, the concept of combat search and rescue directly conflicts with them.

Next, this study will explore the actual need for traditional US Air Force combat search and rescue forces, by considering the strategic environment of the future. Recognizing the political ramifications following the demise of the Soviet Union, this paper will explore how force structures must change to meet current and projected threats and support evolving US policies. The multi-polar world of tomorrow, proliferated with advanced technology and weapons of mass destruction, will be a dangerous place, requiring a unique force structure to enhance US national security. By focusing on emerging threats, as well as the implications associated with a future filled with smaller-scale contingencies, this study will demonstrate that current and future force structures should not embrace a traditional combat search and rescue force, dedicated solely to the recovery of lone pilots and crewmembers, but instead should exist as a powerful multifaceted force, capable of accomplishing an array of special missions, to include combat search and rescue.

Although this proposal may appear expensive at first blush, this study will demonstrate that a merger between special operations and combat search and rescue is economically attainable. In fact, as this study will highlight, the US Air Force already possess the necessary systems required to create this force. MH-60G *Pave Hawk* and MH-53J/M *Pave Low* helicopters, as well as a number of refueling MC-130 variants currently reside in Air Force Special Operations Command, and are capable of conducting offensive operations as well as “selected rescue and recovery missions.”¹⁰ In addition, the US Air Force maintains a conventional combat search and rescue force, which consists of HH-60G *Pave Hawk* helicopters and HC-130 refueling aircraft, as well as a number of UH-1N *Huey* helicopters capable of peacetime search and rescue.

⁹ Bryan Bender, “USAF has eyes on new search and rescue fleet”, *Jane’s Defence Weekly*, 23 December 1998, 8.

¹⁰ Office of the Assistant Secretary of Defense (Special Operations/Low-Intensity Conflict), *United States Special Operations Forces Posture Statement*, 1998, (Washington D.C.: The Pentagon, 1998) 55-59.

In the end, the solution offered by this study embraces a special air capability by merging offensive operations and combat search and rescue into a single organizational structure. This consolidation will stop the “roller coaster” combat search and rescue forces have been riding for the last 50 years. More importantly, however, this dual-role force will give US national security decision makers the offensive capabilities they desire in airpower assets, yet at the same time provide a robust force, capable of consistently providing combat search and rescue to downed pilots and crewmembers.

Chapter 2

THAT OTHERS MAY LIVE

It is my duty, as a member of the Air Rescue Service, to save life and to aid the injured. I will be prepared at all times to perform my assigned duties quickly and efficiently, placing these duties before personal desires and comforts. These things I do, that others may live.

— Code of Air Rescue

Introduction

At 0605, on 21 January 1991, US Navy Lieutenants Devon Jones and Larry Slade bailed

out of their F-14 *Tomcat*, 30 miles from Baghdad, after it was struck by an Iraqi missile.

Enemy forces captured Lieutenant Slade, but Lieutenant Jones managed to evade the enemy.

US Air Force Captain Thomas Trask and his crew, after searching in their MH-53J *Pave Low* helicopter, approached the area where Lieutenant Jones was hiding. At the same time, two A-10A *Thunderbolt II*

ground attack jets destroyed an approaching Iraqi vehicle while Captain Trask pressed the rescue. Captain Trask landed his helicopter 150 yards from the smoldering truck, picked up Lieutenant Jones, and then delivered him safely to Saudi Arabia, completing the first successful combat search and rescue mission of the Gulf War.¹¹

Following the war, this rescue was designated the most meritorious flight of any US Air Force aircraft in 1991, and earned Captain Trask the Mackay Trophy from the US Air Force Chief of Staff. A permanent display in the Air Rescue section of the US Air Force Museum in Ohio, complete with its own official Air Force web site, pays tribute to this heroic rescue.¹² Captain



Figure 1
Air Rescue Service
Shield

Courtesy: Jolly
Green Association

¹¹ Joel Nadel with J.R. Wright, *Special Men and Special Missions* (London: Greenhill Books and Stackpole Books, 1994), 230.

¹² "USAF Air Rescue Service-Desert Storm Rescue... January 21, 1991." Lkd. US Air Force Museum, Wright Patterson Air Force Base, Ohio. No date, <<http://www.wpafb.af.mil/museum/history/rescue/res19.htm>> (10 January 1999)

Trask and his crew, although flying a helicopter assigned to Air Force Special Operations Command, certainly lived up to the code of the Air Rescue Service: “These things I do, that others may live.”¹³

Captain Trask’s mission, however, raises certain questions about US Air Force combat search and rescue. For example, why is an MH-53J *Pave Low* crew, assigned to Air Force Special Operations Command, lauded in the Air Rescue section of the US Air Force museum? During the Gulf War, the US Air Force retained an Air Rescue Service, complete with its own helicopters and airplanes. Where were they?

The answer to this question is complex and not encouraging; however in short, the US Air Force had allowed the Air Rescue Service to lapse into such a state of atrophy, its few forces were unfit to conduct search and rescue missions in a combat environment. To explain why this condition was permitted to develop, why it persists today, and finally what should be done to remedy this condition, requires an understanding of the long-term cultural issues associated with conventional combat search and rescue.

What is Combat Search and Rescue?

Before understanding what combat search and rescue is, it is first necessary to comprehend what it is not. Because of the implicit humanitarian character of combat search and rescue, it is sometimes confused with air ambulances, peacetime search and rescue, and medical evacuations.

First, US Air Force combat search and rescue forces do not display the Red Cross symbol like air ambulances, nor do the provisions of the Geneva Convention or applicable laws of war provide crewmembers any special protection, like their medical counterparts.¹⁴ In fact, unlike their medical peers, combat search and rescue forces are considered to be combatants, executing their missions in heavily armed weapon systems capable of

¹³ Earl H. Tilford, *The United States Air Force Search and Rescue in Southeast Asia* (Washington D.C.: Center for Air Force History, 1980), 119. During the Korean War, the commander of the Air Rescue Service, then Colonel Richard T. Kight, coined this motto. It remains popular today among US Air Force rescue professionals.

¹⁴ US Air Force Technical Sergeant Randy Pool, Non Commissioned Officer in Charge, Civil Law, 42nd Air Base Wing, Maxwell Air Force Base, Alabama, interview by author, 21 February 1999, Office of the Judge Advocate General, Maxwell Air Force Base, Alabama.

conducting offensive action. Secondly, although some combat search and rescue forces vigilantly monitor US Air Force fighter operations during peacetime training, and stand ready to respond quickly to aircraft mishaps or even civilian emergencies, this mission is secondary to their combat search and rescue commitments.¹⁵ Finally, US Air Force combat search and rescue forces are not responsible for evacuating injured soldiers from battlefields. Normally, US Army medical evacuation helicopters and ambulances, prominently displaying the internationally recognized Red Cross markings, perform this mission. Ironically, then, although combat search and rescue is not an “offensive” warfighting mission, it is also not a medical mission. Hence the confusion regarding the nature of combat search and rescue.

Defining exactly what the term “combat search and rescue” actually means poses a conundrum. Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, defines combat search and rescue as, “A specific task performed by rescue forces to effect the recovery of distressed personnel during war or military operations other than war.”¹⁶



Figure 2

A US Army medical evacuation helicopter. US Air Force combat search and rescue aircraft are not designed to evacuate injured soldiers from battlefields, nor do they display Red Cross markings. Photo courtesy Sikorsky Inc.

¹⁵ US Air Force Captain Larry Nixon, HH-60G *Pave Hawk* Helicopter Pilot, larry00@kdn0.attnet.or.jp, “FW: Questions”, Transmitted 13 December 1998. Personnel e-mail received 14 December 1998. Captain Nixon provides an example, in that the 33rd Rescue Squadron at Kadena Air Base, Japan, keeps an alert helicopter in the air, or at least an assigned crew within five minutes from a designated point in their building, when US Air Force fighters are flying in the local area.

¹⁶ Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms* (Joint Pub 1-02) (Washington, D.C.: 23 March 1994, as amended through 12 January 1998), 99.

Perhaps a more comprehensive definition is to be found in the now superceded Air Force Doctrine Document 34, *Combat Search and Rescue Operations*, which defined combat search and rescue as “the use of aircraft, surface craft, submarines, specialized rescue teams and equipment to search for and rescue personnel in distress on land or at sea.”¹⁷ The Joint Staff is attempting to establish a universally accepted definition, and a recent proposal to Joint Publication 1-02 holds that:

Combat search and rescue [is] a specialized capability to recover downed fixed-wing pilots and other aircrew that are incapable of providing mutual support during war and operations other than war where a hostile situation may exist, before they are captured, or enter an assisted evasion mechanism.¹⁸

Thus, precisely defining what combat search and rescue means is difficult at best, because the mission is perceived differently according to the peculiar lens of the viewer. For example, the US Navy places considerable emphasis on integrating rescue planning and coordination into all strike operations, while the US Marine Corps views it as an “implied tasking” that should not detract from primary functions.¹⁹ The US Air Force tends to advertise that it has a robust combat search and rescue capability, and even serves the Secretary of Defense as the executive agent for personnel recovery.²⁰ However, in contrast, the US Army tasks the job to its medical evacuation units as a secondary mission, despite a 1994 ruling by the Army Judge Advocate that, “MEDEVAC [Medical evacuation] aircraft may not be used for CSAR [combat search and rescue] so long as they bear the marking and seek the protection established in law of war for [medical evacuation] aircraft.”²¹

The confusion is exacerbated because, although Joint Force Commanders have primary authority and responsibility for combat search and

¹⁷ Department of the US Air Force, *Combat Search and Rescue Operations* (Air Force Doctrine Document 34) (Washington D.C.: 30 December 1994), 1.

¹⁸ Veda Incorporated, “Combat Search and Rescue Report to the Joint Chiefs of Staff and the Executive Agent for Combat Search and Rescue”, *Combat Search and Rescue Requirements and Capabilities Study*, (Washington D.C.: 10 February 1997) 5.

¹⁹ Joint Chiefs of Staff, *Doctrine for Joint Combat Search and Rescue* (Joint Pub 3-50.2) (Washington, DC.: 26 January 1996) appendixes B-1 (Navy) and C-1 (Marine).

²⁰ Assistant Secretary of Defense, *Personnel Recovery* (Department of Defense Directive 2310.2) (Washington D.C.: 30 June 1997), 6.

²¹ Veda Incorporated, *Combat Search and Rescue Requirements and Capabilities Study*, 17.

rescue in support of their areas of responsibility, each service, plus US Special Operations Command, is only responsible for performing combat search and rescue in support of its own operations.²² In other words, providing combat search and rescue is a primary mission for Joint Force Commanders, but a support mission for each component commander.

Studies abound that advocate redefining combat search and rescue and modifying the organizational structure.²³ However, US Air Force doctrine currently regards combat search and rescue as one segment of an overall personnel recovery program. Thus, the US Air Force has historically designated a force, consisting primarily of helicopters and supporting fixed-wing aircraft, to focus primarily on recovering downed crewmembers. This, according to US Air Force doctrine, is combat search and rescue.²⁴

People of US Air Force Combat Search and Rescue

Normally US Air Force pilots, but sometimes navigators and maintenance professionals, fill executive leadership and middle management positions within combat search and rescue organizations. Most of these officers are HH-60G *Pave Hawk* pilots, while a few are qualified in the HC-130. In addition, most of these officers sustain the proud traditions and symbols established by their predecessors, such as the “*King Bird*” and “*Jolly Green Giant*”, and tend to be fiercely loyal to their occupation and aircraft.²⁵

In addition, there are numerous enlisted people assigned to the combat search and rescue community. Although a significant number serve in maintenance and support positions, many serve as combat crewmembers. For example, pararescuemen are an elite team that comprise the medical component of combat search and rescue, and thus serve as the critical link

²² *Doctrine for Joint Combat Search and Rescue* (Joint Pub 3-50.2), vii.

²³ There are a number of examples, but US Air Force Major John E. Watkins provides a strong argument against the current system. See “Overland Combat Search and Rescue: A Real Fix to an Old Problem” (Unpublished Research Paper, US Naval War College, Newport, Rhode Island: 16 February 1991).

²⁴ Department of the US Air Force, *Combat Search and Rescue Operations* (Air Force Doctrine Document 2-1.6) (Washington D.C.: 30 September 1998), 3.

²⁵ US Air Force Major Matt Lyons, MH-60G *Pave Hawk* Helicopter Pilot and Flight Safety Officer, 58th Special Operations Wing, Kirtland Air Force Base, New Mexico, <MehMatt@aol.com> “Re: paragraph”, Transmitted 12 December 1998. Personal e-mail received 12 December 1998.

between rescue forces and survivors.²⁶ They can parachute, scuba dive, employ weapons, and provide emergency medical care. Flight engineers make up the second group of enlisted crewmembers. These airmen are descendants of flight mechanics, and serve as an integral part of the rescue crew. For example, helicopter flight engineers fire window-mounted machine guns and operate the hoist, while HC-130 flight engineers manage fuel and assist their pilots during emergencies. Finally, HC-130 radio operators and loadmasters contribute to the rescue effort by managing radios and generating precise weight and balance computations, respectively. These enlisted crewmembers carry on a proud heritage, and like their officer counterparts, generally manifest extreme loyalty to the combat search and rescue mission.²⁷



Figure 3

A heavily armed pararescueman in Vietnam. Despite their medical training and commitment to saving lives, US Air Force combat search and rescue professionals are not medical noncombatants, but serve as heavily armed airmen, and operate powerful airpower assets as well. Photo courtesy Senior Master Sergeant Robert LaPointe (Retired), US Air Force.

In critically evaluating the combat search and rescue community, a lack of professionalism or ability on the part of individual crewmembers does not surface. Indeed, rescue crewmembers often augmented special operations flying units during the Gulf War, and several returned home as decorated

²⁶ US Air Force Lieutenant Colonel Thomas P. Finnegan, "HH-60G Crew Complement: Tailoring Your Crew for the End Game," (Unpublished Research Paper, US Air Force Weapons School, Nellis Air Force Base, Nevada: 17 November 1995), 12.

²⁷ US Air Force Senior Master Sergeant (Retired) Robert LaPointe. <rlapointe@compuserve.com> "Re: crewmembers", Transmitted 23 January 1999. Personal e-mail received 24 January 1999.

heroes.²⁸ Moreover, in terms of physical courage alone, these crews routinely fly heroic peacetime rescue missions, and frequently garner high-level awards and decorations for their heroism.

However, in examining the careers of these highly dedicated professionals, there seems to be a significant scarcity of senior officers sporting a combat search and rescue background. In fact, US Air Force Colonel Jim Sills recently wrote, “No one has ever been promoted to General Officer based solely on a rescue background. Every current helicopter GO [General Officer] has earned his star in the airlift or special ops arena.”²⁹ Moreover, and validating Colonel Sills’ observation, US Air Force Colonel Ken Pribyla recently opined that the subservient nature of combat search and rescue, that is being organizationally aligned with CAF [Combat Air Force] “customers”, has led to a number of leadership challenges. In fact, he colorfully described this problem during a recent conference, as “leaving us somewhat headless.”³⁰

In predicting the prognosis of an organization, dedicated solely to combat search and rescue, one cannot ignore this enigma regarding senior officer progression. In addition, one cannot simply claim that the US Air Force is biased against helicopter pilots, as Bryant Jordan recently suggested in an *Air Force Times* article, since a number of helicopter pilots, with special operations or airlift backgrounds, have developed into General Officers.³¹ In addition, since combat search and rescue personnel operate powerful airpower assets like their fighter, bomber, and special operations counterparts, it would seem logical that they would groom their own senior leaders from within. However, to understand the long-term cultural issues associated with conventional combat search and rescue, and thus comprehend why US leaders consistently allow it to persist in such an inauspicious state, one must dig even deeper.

²⁸ US Air Force Major (now Lieutenant Colonel) Joseph J. Falzone, *Combat Search and Rescue; CSEL Enhancements for Winning Air Campaigns*, (Alabama: Air University Press, Maxwell Air Force Base, 1997), 58.

²⁹ US Air Force Colonel Jim Sills, SillsJ@Hurlburt.af.mil “RE: research update”, Transmitted 26 February 1999. Personal e-mail received 27 February 1999.

³⁰ US Air Force Colonel Ken Pribyla, Director of Personnel Recovery, Operations and Training Directorate, “Keynote Address.” Conference briefing, SAR [Search and Rescue] the Americas-Conference and Exhibition, Crystal Gateway Marriott Hotel, Arlington, Virginia, 21 May 1999.

Modus Operandi

The modus operandi for US Air Force combat search and rescue has always revolved around speed of response. In fact, Air Rescue Service newsletters from the Korean War indicate that the time to react to downed crewmembers was frequently considered the primary measure of effectiveness.³² Not all rescues require a quick reaction, but the benefits of an immediate response are normally related to the distance required to travel, the medical condition of the downed crewmember, external environmental conditions confronting the survivors, and the threat from enemy forces.

The first variable, distance, is measured by multiplying rate and time ($D = RT$). An HH-60G *Pave Hawk* helicopter with four hours of fuel, flying 150 knots, can fly to a location 300 nautical miles away, and return without refueling. Combat search and rescue helicopters can mitigate distance problems by using air or ground refueling, but this is at the expense of time. Distance problems are normally reduced by placing rescue forces as close as possible to the potential rescue area. For example, US Air Force combat search and rescue helicopters supporting forces enforcing the no fly zone in Southern Iraq are “tethered” as close as possible to the border of Iraq.

The second variable is the medical condition of the downed crewmember. The “golden hour” is a rule of thumb used frequently in emergency medicine. Helicopter flight paramedic Earl Forsythe explained this concept: “I’m sure you’ve heard of the golden hour, a trauma patient’s chances of dying increase one percent every minute they have to wait for medical care, and so much of that golden hour has been used up by the time we get to the patient.”³³ Theoretically, assuming no delay from mishap to rescue helicopter departure, and where $T=1$ hour and $R=150$ knots, the maximum distance the HH-60G *Pave Hawk* helicopter could fly to deliver medical care to an injured crewmember, within the golden hour, is 150 nautical miles away. For every minute the helicopter is delayed from departing, this distance decreases 2.5

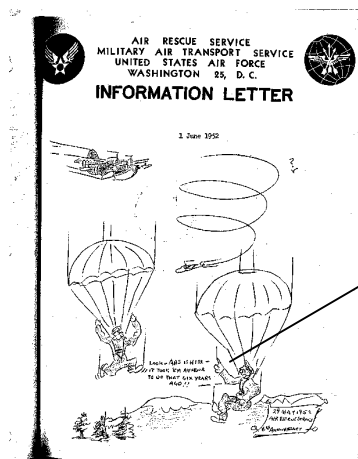
³¹ Bryant Jordan, “Helo Pilots are 'Poor Relations' of Aviator World”, *Air Force Times*, 3 May 1999, 8.

³² “ARS Pilot makes two minute rescue, fastest in Korean War”, *Air Rescue Service newsletter*, (Information Services Division, Headquarters Air Rescue Service, Washington DC.: 1 Jan 1952) 3.

³³ Earl Peterson, Helicopter Flight Paramedic, Specialized Treatment and Transport, Pittsburgh, Pennsylvania, as quoted by Linda Peterson, *Emergencies*, (New Jersey, Petersons, 1993) 58.

miles and the crewmember's chances of survival decrease one percent every sixty seconds.³⁴

Environmental conditions are the third variable that drives this dynamic, both in peacetime and war. For example, a person in 40-50 degree water has a 50 percent chance of surviving longer than an hour, but in colder water (e.g. 35 degrees), the person will most likely die within 10-15 minutes.³⁵ US Air Force fighters routinely fly over environmentally austere conditions. For example, a number of F-15 *Eagles* based at Keflavik, Iceland, fly almost 30 training missions a week over frigid water, up to 250 miles from land.³⁶ Although these pilots wear anti-exposure suits to decrease the onset of hypothermia, their chances of survival in the water would still quickly diminish with time.



Downed Pilot: "Look - ARS is here - It took 'em an hour to do that six years ago!!"

Figure 4
Time as a measure of effectiveness. Air Rescue Service newsletters from the Korean War suggest that time to respond has always been a measure of effectiveness for combat search and rescue forces. Drawing reproduced from actual newsletter, dated 1 June 1952.

The last variable is the disposition of the enemy. In 1995, the Joint Staff initiated a review of theater requirements and capabilities for personnel recovery. In each theater, the window of opportunity to rescue a downed crewmember was identified as between one and two hours.³⁷ This requirement for a quick response was validated during the Gulf War. Due to dense enemy

³⁴ Since 1 minute = 1/60 hour, and $D=RT$, then the distance traveled in 1 minute at 150 knots is calculated using $RT=D$, specifically, $(150 \text{ nautical miles/hour}) (1/60 \text{ hour})=2.5 \text{ nautical miles}$.

³⁵ US Air Force Master Sergeant Cathy Cox, "Tactical Air Aircrew Life Support Journeyman", Volume 2: *Emergency Procedures and Equipment*. (Extension Course Institute, Air University) 240.

³⁶ US Air Force Major Chris Nowland, Student, School of Advanced Airpower Studies, and F-15 pilot, recently returned from an assignment at Keflavik Naval Air Station, Iceland. Interview by author, 11 December 1995, Air University Library, Maxwell Air Force Base, Alabama.

³⁷ 1995 Joint Staff Review, as quoted by Veda Incorporated, *Combat Search and Rescue Requirements and Capabilities Study*, 8.

concentrations, coupled with the use of radio direction-finding equipment, a number of downed pilots were captured immediately after parachuting to the ground.³⁸

Speed of response is a key operational capability that drives US Air Force combat search and rescue forces. In turn, they have adopted a unique way to conduct warfare, which differs greatly from historical, current, and most likely future offensive methods. The following list, taken from the *1997 Combat Search and Rescue Requirements and Capabilities Study*, published by Veda Incorporated, depicts the key elements of US Air Force combat search and rescue forces:

- Rarely involved with the planned employment of ground forces
- Rarely joint in nature
- Reactive, not proactive
- Result of other actions in the campaign plan
- Results advertised
- Discovery by opposition does not usually end the mission
- Most effective during daylight
- Personnel recovery is only mission
- Not rehearsed
- Relies on general, not specialized intelligence, weather, and logistics support
- Requires localized air superiority
- Requires a combat search and rescue task force for protection.³⁹

Conventional combat search and rescue forces, using time to respond to emergencies as a primary measure of effectiveness, operate under a unique modus operandi. They neither act offensively, nor do they routinely coordinate with the operational or strategic employment of ground or joint forces. They tend to anchor themselves to static positions, where they maintain a reactive versus proactive posture. Once tasked, they normally have very little time to assimilate intelligence, plan, or rehearse, but instead rely on available combat aircraft for protection and escort.

Evidence suggests that the entire concept of dedicated combat search and rescue forces conflicts with generally accepted tenets of military and airpower theory. In fact, it is this disharmony that has contributed to the cyclic

³⁸ John F. Guilmartin, Task Force Chief, Part One, "Weapons, Tactics, and Training", *Gulf War Air Power Survey*, Volume IV, (Washington D.C.: US Government Printing Office), 302

³⁹ Veda Incorporated, *Combat Search and Rescue Requirements and Capabilities Study*, 19.

history and long-term cultural problems associated with combat search and rescue. Before searching for a solution, however, one must first determine if a need for combat search and rescue still exists, then if so, develop a force structure and modus operandi of which US leaders would find practicable.

Why have US Air Force Rescue?

The US Air Force contends that successful Air Force combat search and rescue enhances the Joint Force Commander's combat capability in several ways. In fact, US Air Force combat search and rescue doctrine states:

First, CSAR operations return key personnel to friendly control, allowing them to fight again. Secondly, CSAR operations often influence the course of national and international politics by denying adversaries the opportunity to exploit the intelligence and propaganda value of captured personnel. Lastly, the presence of a robust and viable CSAR force increases morale, with a resultant increase in operational performance.⁴⁰

Initially, these seem like valid reasons for supporting a robust force structure, dedicated solely to conventional combat search and rescue. However, these reasons must be critically evaluated.

First, the concept of returning key personnel so they can fight again is frequently linked to the Battle of Britain. As this battle reached its climax in the summer of 1940, the Royal Air Force lost 450 men in six weeks, prompting Winston Churchill to write, "Their places could only be filled by 260 new, ardent, but inexperienced pilots drawn from training units, in many cases before their full courses were completed."⁴¹ This led to the creation of an Air-Sea Rescue Service which rescued 444 pilots and crewmembers from the frigid English Channel and North Sea over the next several months.⁴²

Although it is true that Royal Air Force pilots often parachuted to safety during this battle, then flew a replacement aircraft that same day, this one historical event does not validate this particular reason for combat search and

⁴⁰ Department of the US Air Force, *Combat Search and Rescue Operations* (Air Force Doctrine Document 2-1.6) (Washington D.C.: 30 September 1998), 4.

⁴¹ Winston S. Churchill, as quoted by Tilford, 5.

⁴² Tilford, 5.

rescue. In fact, Colonel John Warden, in his book *The Air Campaign*, notes that if a pilot is shot down over enemy territory, he is normally (considered) lost, at least for some extended period of time.”⁴³ Colonel Warden then points out that a certain number of pilots will always be killed, wounded, or captured in the course of air battles and unless there is a closely circumscribed pool of pilots, coupled with a comparatively large number of aircraft, planners should probably not identify pilot strength as a center of gravity.⁴⁴ Joint air campaign planners are even taught this philosophy at Air University. Lieutenant Colonel Rick Clark, the Chairman of the Joint Doctrine Air Campaign Course said, “No method exists to incorporate projected rescued pilots into attrition rates; you just cannot count on these for air campaign planning purposes.”⁴⁵

Therefore, producing aircraft faster than pilots and crews, then factoring in an estimated percentage of them to be retrieved, is not the way attrition rates are calculated and evaluated in the US Air Force. Moreover, if this were a primary reason for combat search and rescue, then greater emphasis would be given to saving healthy pilots capable of flying again, rather than critically injured ones. Although a triage system like this exists in the combat medical community, a similar “rescue triage” concept for combat search and rescue has no historical precedence and does not currently exist.

From a strategic viewpoint, there are more efficient ways to replenish downed crewmembers than by rescuing them. For example, US leaders can draw upon the Air National Guard and Air Force Reserve for additional crewmembers. In addition, increasing officer accessions and aircrew training, in conjunction with increasing aircraft procurement in wartime has been used in the past. Finally, solving current pilot retention issues within the US Air Force would preserve these resources more effectively than combat search and rescue forces in wartime ever could. Although pilots and crews are expensive to train, and certainly important to retrieve if downed, one must dig deeper than this particular reason to understand why.

⁴³ US Air Force Colonel John Warden, *The Air Campaign, Planning for Combat* (Washington, D.C.: National Defense University Press, 1988), 43.

⁴⁴ Ibid., 44.

⁴⁵ US Air Force Lieutenant Colonel Rick Clark, Chairman, Joint Doctrine Air Campaign Course, Air University. Interview by author, 21 February 1999, Maxwell Air Force Base, Alabama.

The second published benefit of combat search and rescue, denying an adversary the opportunity to exploit intelligence, has wide appeal. For example, Desert News movie critic Chris Hicks describes the downed flyer in the popular movie *Bat 21* as, “such a big-wig, with so many military secrets the enemy would like to learn, his superiors are in no small hurry to rescue him before he's captured.”⁴⁶ In addition, US Army Major Russell Carmody claims that “adversaries may use various torture methods to gain intelligence information which may compromise a military response to a crisis situation.”⁴⁷

Although this is a popular reason for having a robust combat search and rescue capability, it is not entirely plausible for several reasons. For example, if the capture of Lieutenant Colonel Iceal Hambleton, the actual survivor portrayed in *Bat 21*, would have been that devastating to US national security, it is unlikely his superiors would have allowed him to be flying his 63rd combat mission in the first place.⁴⁸ In addition, Staff Sergeant Peter Hudlow, a resistance training instructor at the US Air Force survival school, believes that young pilots are the most likely candidates to become captive, and therefore questions the amount of strategic knowledge they may possess. According to Staff Sergeant Hudlow, “The amount of knowledge in war ops [sic] in theater is definitely limited to what they have seen, or what they were briefed, which is usually just what they need to know for a particular mission.”⁴⁹ Finally, retired US Air Force Colonel Henry P. Fowler Jr., a prisoner of war in Vietnam for nearly six years, also discounts the amount of intelligence the enemy can retrieve from the average downed crewmember. He said that the first two or three weeks were “hell”, as the North Vietnamese tried to ascertain future targets; however, the average pilot was only given his targets on a day-by-day basis, and really had little important information to divulge.⁵⁰

⁴⁶ “Movie Review; *Bat 21*” Lkd. Desert News.com, Salt Lake City, Utah, 28 October 1998, <http://www.desnews.com/movies/reviews/ip0u463g.htm>, (21 February 1999).

⁴⁷ US Army Major Russell D. Carmody, “Theater Combat Search and Rescue.” (Unpublished Research Paper, US Army Command and General Staff College, Fort Leavenworth, Kansas: 1993) 104.

⁴⁸ Darrel D. Whitcomb, *The Rescue of Bat 21*, (Maryland: Naval Institute Press, 1998), 120.

⁴⁹ US Air Force Staff Sergeant Peter Hudlow, resistance instructor at the US Air Force Survival School, Fairchild Air Force Base, Washington. Telephone interview with author, 24 February 1999.

⁵⁰ US Air Force Colonel Henry P. Fowler, Jr. (Retired). F-4 pilot downed in North Vietnam, 26 March 1967, now professor of law, Jones School of Law, Faulkner University, Montgomery, Alabama. Telephone Interview with author, 25 February, 1999.

Although a process exists by which a Rescue Coordination Center, or Rescue Coordination Team in the case of the US Navy, can designate someone as a “priority rescue”, combat search and rescue forces have historically saved downed crewmembers without regard to their security clearances.⁵¹ Thus, from a national security standpoint, it would be more effective to prohibit airmen with excessively sensitive knowledge from flying combat missions, and to compartmentalize or limit the information given to individual crewmembers, rather than rely on combat search and rescue forces to retrieve them. Many pilots and crewmembers may be expert tacticians, however most of their intelligence knowledge is limited or time sensitive, and of questionable value to an adversary. Therefore, one must again dig deeper to understand why it is important to save them if they are downed.

The third published benefit of combat search and rescue, denying an adversary the opportunity to exploit the propaganda value of captured personnel, also has wide appeal. For example, Iraq forced coalition prisoners to criticize the coalition offensive and threatened to use them as “human shields” around potential targets during the Gulf War.⁵² And as Colonel Fowler remarked regarding North Vietnamese propaganda ploys, captured American flyers were forced to write letters to various Senators, B-52 pilots, and Jane Fonda decrying the war effort.⁵³ Finally, Staff Sergeant Hudlow asserts: “These statements made by US prisoners during the Vietnam War had a major swaying effect on public opinion.”⁵⁴

Once more, however, this popular viewpoint is not entirely plausible. For example, the propaganda value that Iraq desired was spoiled by the international media, as well as publications such as Gustavo Ferrari and Jean Lou Bersunder’s *Kuwait*. Using graphic photos, these authors condemned Iraq for abusing prisoners of war, charging “an obvious violation of the Geneva

⁵¹ Joint Publication 3-50.2, *Doctrine for Joint Combat Search and Rescue*, J1-4. US combat crewmembers maintain a Department of Defense Form 1833, Isolated Personnel Report, which contains personal information rescue forces can use to help identify and recover downed crewmembers. On this form is a “priority rescue” block, which officials can check if required.

⁵² Gustavo Ferrari and Jean Lou Bersunder, *Kuwait; War in the Gulf*, (Kuwait: Sipa Press, The Kuwait Bookshops Co. Ltd., 1992), 85.

⁵³ Fowler interview.

⁵⁴ Hudlow Interview.

Convention which Iraq signed.”⁵⁵ In addition, US prisoners of war in Vietnam routinely spoiled propaganda attempts by the North Vietnamese. Regarding war crime confessions and statements they could not thwart, Colonel Fowler remarked, “To me, anyone with half his sense, is not going to believe anything that comes out of a prisoner of war camp.”⁵⁶ Finally, according to the memoirs of Viet Cong leader Truong Nhu Tang, his propaganda strategy included exploiting the US invasion of Cambodia, plus the negative US perceptions associated with the Tet Offensive.⁵⁷ In fact, nowhere in his memoirs does Tang discuss the use of US prisoners of war in the strategic level propaganda campaign against the US.

Although few US citizens want to see their military men and women imprisoned and tortured into confessing war crimes, it would be logical to assume that the majority of the public would view this as coercion. For example, it was not the forced confessions of US prisoners of war in North Vietnam that caused widespread dissent within the US, but rather it was US policy in Southeast Asia that was perceived as the problem. Current and future US leaders could presumptuously thwart the exploitation of prisoners by setting clear political objectives, solid military goals, and an effective plan to demonize the enemy. An effective combat search and rescue force may decrease the number of prisoners of war, but their exploitation value cannot be measured in numbers, but instead by national security policy. Therefore, combat search and rescue is not the most effective tool for counter-propaganda operations.

The fourth published benefit of having a robust combat search and rescue capability is to increase the morale of the combatants. Indeed, one can argue that this is the primary reason the US invests in this capability. In fact, the United States has always placed a high value on the dignity, importance, and worth of individual human life.⁵⁸ Retired Major General Ervin Sharp, the former US Air Force Air Combat Command Director of Operations, recently validated this attitude when he wrote, “Ongoing high personnel and operations

⁵⁵ Gustavo Ferrari and Jean Lou Bersunder, 85.

⁵⁶ Fowler Interview.

⁵⁷ Truong, Nhu Tang, *A Vietnam Memoir*, (New York: Vintage Books, 1985), 213.

tempo will require us to continue to place our Service members and civilian men and women in harm's way. Preserving their lives and well-being must remain one of our highest priorities.”⁵⁹

The comments made by General Sharp echo the concerns of US flyers for decades, in that it has always been important for them to believe someone will try and rescue them if they are shot down. In 1952, an F-86 pilot opined, “It’s a big boost to a fighter pilot’s morale to know that an ARS [Air Rescue Service] SA-16 or a helicopter will pick him up if he is forced down.”⁶⁰ Thirty-nine years later, Major Thomas E. Griffith, a US Air Force F-15E *Strike Eagle* crewmember, and former prisoner of war in Iraq wrote, “Imagine that you are sent on a combat mission with no hope of rescue if you are shot down. Doesn’t sound motivating does it? But that is exactly the position we are putting our aircrews in today.”⁶¹ A prompt rescue could obviate years, or even decades of torturous internment. Indeed, although Major Griffith spent several months as a prisoner of war, Major Jack Chang, piloting a U-2 spy plane over China, was shot down and captured on 10 January 1965, but was not released until October 1983.⁶²



Figure 5
Internment and torture of an airman. The US is intolerant of abandoning their airmen in hostile territory, or allowing them to endure a torturous internment as prisoners of war. Therefore, a viable combat search and rescue force boosts

⁵⁸ Clarence Hobdy, Jr., “Search and Rescue as an Instrument of National Policy” (Unpublished Research Paper, Auburn University, AL: 30 May 1970), 1.

⁵⁹ US Air Force General Ervin Sharpe (Retired). Former Air Combat Command Director of Operations. Memorandum to the Joint CSAR Process Action Team Members, Langley Air Force Base, Virginia, no date.

⁶⁰ *Air Rescue Service newsletter*, 1 January 1952, 3.

⁶¹ US Air Force Major (now Colonel) Thomas Griffith, “Position Paper on Improved Search and Rescue” (Unpublished Research Paper, Air Command and Staff College, Maxwell Air Force Base, Alabama, 15 October 1991), 1.

⁶² Curtis Peebles, *Dark Eagles: A History of Top Secret US Aircraft Programs*. (California: Presidio Press, 1995), 93.

In the final analysis, US Air Force combat search and rescue forces do not exist primarily to return combatants to the fight. Nor do combat search and rescue forces exist to deny adversaries the opportunity to acquire limited tactical intelligence from prisoners of war, or to prevent coerced pilots from damaging national and international policies through obviously forced confessions. Instead, these unique forces exist because of the humanitarian desire to prevent Americans like Colonel Fowler from dying in a foreign land, or enduring a torturous internment as prisoners of war. Thus, the primary reason for retaining a combat search and rescue capability is to enhance morale, “with a resultant increase in operational performance.”⁶³

Considering this humanitarian reason for maintaining a robust conventional combat search and rescue force, some think military leaders should elevate this mission as a top priority when allocating resources.⁶⁴ History demonstrates, however, that senior military leaders have not always reached these same altruistic decisions, nor should they be expected to do so in the future. The next chapter of this study validates this assertion.

⁶³ US Air Force, *Combat Search And Rescue*, Air Force Doctrine Document 2-1.6 (Washington: September 1998), 4.

⁶⁴ Wing Commander B. E. Sutherland, “Combat Search and Rescue in the Australian Defence Force - The Reality That Won’t Go Away?” (Australia, Air Power Studies Centre, paper number 68, September 1998). Wing Commander Sutherland argues that leaders must recognize that combat search and rescue has changed warfare over this century, and must allocate vast resources respectively.

Chapter 3

National Security Decision Making and Combat Search and Rescue

The US Air Force Doctrine parallels the Army and USMC [US Marine Corps] notion that combat search and rescue should not preclude execution of higher priority missions, divert critically needed forces from ongoing operations, or allow the overall military situation to deteriorate.

— *Combat Search and Rescue Requirements and Capabilities Study*, Veda Incorporated, 1997

Introduction

General Michael Ryan, the US Air Force Chief of Staff recently stated, “When we went after [US Air Force Captain Scott] O’Grady, we flew over 400 sorties trying to find him, and the night we went after him, we had about 30 to 35 airplanes in the air focused only on that mission—and we had other missions going on as well.”⁶⁵

General Ryan’s comments are not unlike those made by his predecessors during the Vietnam War. For example, after learning that three aircrew members had been shot down but remained alive, Colonel Jack Broughton diverted an entire strike package, designed and dispatched to destroy a target in the Hanoi area, to conduct what he later described as “the world’s greatest potential rescue effort.”⁶⁶

The nature of the Vietnam War served as a catalyst for the US Air Force to develop the greatest combat aircrew recovery force in the history of aerial warfare.⁶⁷ While the US Air Force lost 2,254 aircraft, with 1,763 airmen either killed, captured, or missing, US Air Force rescue assets saved 3,883 lives.⁶⁸ In the end, the Aerospace Rescue and Recovery Service gallantly rescued roughly

Figure 6
Captain Scott O’Grady. Photo courtesy US Air Force.



⁶⁵ General Michael Ryan, US Air Force Chief of Staff, as quoted by Greg Alan Caires, “Advanced Aircraft Bolster Search, Rescue Capability”, *National Defense*, February 1999, 28.

⁶⁶ Darrel D. Whitcomb, *The Rescue of Bat 21*, (Maryland: Naval Institute Press, 1998), 138.

⁶⁷ Earl H. Tilford, *The United States Air Force Search and Rescue in Southeast Asia* (Washington D.C.: Center for Air Force History, 1980), 155.

⁶⁸ *Ibid.*

68 percent of all downed airmen during the Vietnam War.⁶⁹ Nevertheless, as Darrel Whitcomb, author of *The Rescue of Bat 21* points out, combat search and rescue missions do not win wars.⁷⁰

History suggests that the high regard for combat search and rescue in Vietnam and the emphasis on it today are transient anomalies. Tales from Vietnam, force protection issues, and the perception of a casualty averse US public tends to distract decision makers from understanding the true nature of war. Specifically, successful military leaders in the past normally focused their efforts on destroying their enemies, even at the expense of having an altruistically based combat search and rescue force. History also documents that many leaders who failed to focus on this primary task, and instead emphasized limiting losses, did not fair well.

Therefore, to comprehend the root issues associated with conventional search and rescue in the US Air Force, and to comprehend viable solutions, one must first move beyond the historical anomalies of the Vietnam War and current issues of the day. It is more beneficial to explore the decisions that national security decision makers made in the past while facing difficult conditions. By tracking national security decision making from World War I to the present, one can use this information to predict the meager prognosis of a future organization or force, dedicated solely to conventional combat search and rescue, permanently flourishing within the US Air Force. Instead, the evidence suggests that national security decision makers and US leaders would be more likely to support a multifaceted force capable of conducting offensive operations, as well as combat search and rescue.

World War I

World War I began in 1914 as a European conflict, but eventually became a global war involving 32 nations.⁷¹ National security decision makers in this war of attrition expended their resources to kill the maximum number of enemy soldiers possible. For example, the Battle of the Somme in 1916 cost the

⁶⁹ US Air Force Major (now Colonel) Thomas Griffith, "Position Paper on Improved Search and Rescue" (Unpublished Research Paper, Air Command and Staff College, Maxwell Air Force Base, Alabama, 15 October 1991), 1-2.

⁷⁰ Whitcomb, 155.

⁷¹ *Microsoft Encarta 97 Encyclopedia*, 1993-1996 Microsoft Corporation. "World War I."

British more than 400,000 casualties; the French more than 200,000; while Germany lost over 600,000.⁷² In fact, 21,000 British soldiers were killed and another 39,000 were wounded in the first hour of battle.⁷³ When the war ended, the belligerents had spent some \$186 billion and killed or wounded more than 37 million troops.⁷⁴



Figure 7
Battle of the Somme. World War I challenged leaders with multitudinous casualties, leaving little time to think about humanitarian desires to save downed pilots. Photo courtesy Microsoft Encarta Encyclopedia.

World War I witnessed the emergence of new weapons and tactics, but nothing related to combat search and rescue for downed pilots. In fact, many allied pilots were not even allowed to wear parachutes, because the leadership believed they might abandon their damaged airplanes instead of trying to save them.⁷⁵

Leaders in this war focused primarily on the strategic objective of victory, which translated to specific operational and tactical objectives. In the end, this meant killing as many soldiers as possible. Little consideration was given to restraining casualties, to include enhancing the safety of individual pilots downed in combat. Thus, saving downed pilots was of little importance, and although lessons learned in World War I contributed greatly to future airpower theory and doctrine, this war prompted little in the way of creating a robust combat search and rescue capability for the future.

⁷² Ibid.

⁷³ John Keegan, *The Face of Battle: A Study of Agincourt, Waterloo and the Somme* (London: Penguin, 1976), 260.

⁷⁴ *Microsoft Encarta 97 Encyclopedia*, "World War I."

⁷⁵ James L. Stockenbury, *A Short History of World War I*, (New York: William Morrow and Company: 1981) 252.

The Interwar Period

Despite a national attitude of isolationism, the relatively calm years between World Wars I and II brought great strides to US military aviation. Engineers exploited technology to produce superb aircraft, such as the AT-6 *Texan* and Curtis P-36C Pursuit airplane.⁷⁶ William “Billy” Mitchell bluntly advocated for airpower concepts during this period, and passed his legacy on to an entire generation of airmen at the US Air Corps Tactical School.⁷⁷

In contrast to the great strides made in fixed-wing aviation during this period, most engineers interested in rotary-wing aerodynamics only experimented with “gyroplanes.” A few, however, produced some rudimentary helicopters, such as the Sikorsky VS-300 in 1939. German helicopter designer Anton Flettner developed a helicopter which aroused the interest of the German Navy in 1939, but German leaders were interested in it for offensive antisubmarine patrols, and not for combat search and rescue.⁷⁸ No combat search and rescue advocates emerged during this period, and the Air Corps Tactical School did not teach combat search and rescue concepts to its future aviation leaders.

World War II

World War II erupted in 1939, when Germany committed about 1.5 million troops, to include 1600 modern aircraft, against 1.8 million Polish soldiers and their 935 airplanes.⁷⁹ Allied nations in Europe literally fought for their survival, while US Army Air Corps strategists developed a plan to defeat Germany. Designated “AWPD-1”, this plan employed 2,164,916 men, 68,416 aircraft, and 2,133 reinforcement planes per month.⁸⁰ In the Pacific, US leaders such as General Douglas MacArthur, Admiral Chester Nimitz, and General Curtis LeMay fought their way to Japan with heavy casualties. Ultimately, the US dropped an atomic bomb on Hiroshima, killing over 70,000

⁷⁶ David A. Anderton, *The History of the US Air Force*, (New York: Aerospace Publishing Ltd, 1981) 43-44.

⁷⁷ David R. Metts, *The Air Campaign; John Warden and the Classical Airpower Theorists* (Alabama: Air University Press, Maxwell Air Force Base, December 1998) 42.

⁷⁸ Giorgio Apostolo, *World Encyclopedia of Civil and Military Helicopters* (London: Willow Books, 1984) 18.

⁷⁹ *Microsoft Encarta 97 Encyclopedia*, 1993-1996 Microsoft Corporation. “World War II.”

⁸⁰ *AWPD-1; The Process* (Alabama: Historical Analysis, Joint Doctrine Air Campaign Course, Air University, Maxwell Air Force Base, April 1996), 55.

people, then Nagasaki, killing another 39,000.⁸¹ When World War II finally ended, the international community had spent about \$1.5 trillion, and 56.4 million people had been killed.⁸² The US alone sustained 292,131 battle deaths, and suffered another 115,187 deaths from other causes.⁸³

There is no historical evidence suggesting that national security decision makers in Poland or France ever considered rescuing downed pilots as their national governments collapsed under the Nazi onslaught. From the US standpoint, AWPD-1 did not even consider combat search and rescue as an issue to be addressed. US leaders concentrated on fighting the war, and simply left air-sea rescue to Great Britain until September 1942.⁸⁴ In fact, the first helicopter rescue did not even occur until April 1944. In the end, the concept of combat search and rescue grew from infancy to an organized capability during this war, however in reality, it actually saved less than 5000 Army Air Force crewmembers during the entire conflict.⁸⁵

Figure 8

The first US Army Air Forces' helicopter rescue. This mission occurred in Burma, behind Japanese lines, on 25-26 April 1944. Three wounded British soldiers and the pilot were saved. Photo courtesy US Air Force museum.

Although this number seems quite paltry, compared to the millions of casualties in World War II, these lives saved by rescue forces were significant from a morale enhancing viewpoint. Nevertheless, US national security decision makers and senior leaders in World War II focused primarily on warfighting, and gave little consideration to combat search and rescue. A strategically insignificant, albeit noble combat search and rescue program emerged, but it was never considered a priority by US leaders.

⁸¹ *Microsoft Encarta 97 Encyclopedia*, 1993-1996 Microsoft Corporation. "World War II."

⁸² Nic Kynaston, ed., *The Guinness Book of World Records*, (Guinness Publishing Ltd, 1998)192.

⁸³ *Microsoft Encarta 97 Encyclopedia*, "World War II."

⁸⁴ Tilford, 6.

⁸⁵ US Army Major Rickey L. Rife, "Combat Search and Rescue, a lesson we fail to learn" (Unpublished Research Paper, School of Advanced Military Studies, Fort Leavenworth, Kansas: May 1994) 7.

Korean War

In June 1950, the world was shocked when North Korean forces invaded South Korea. The war initially went badly for United Nations forces, primarily American, but on 15 September 1950, General Douglas MacArthur launched an amphibious invasion behind enemy lines. In a coordinated move, United Nations forces broke out of the Pusan perimeter, and routed North Koreans above the 38th parallel. Once the Chinese intervened, the war stalemated, and an armistice was declared in 1953. The US suffered 157,530 casualties. South Korea sustained 1,312,836 military casualties, including 415,004 dead. Other allied casualties totaled 16,532, including 3094 dead. Estimated Communist casualties were 2 million.⁸⁶ Prudently, US national security decision makers averted triggering World War III.

US Air Force General Hoyt S. Vandenburg had established an Air Rescue Service four years before the Korean War, at a time of post-war budget cuts and military reductions. From a fiscal standpoint, this organization competed poorly with US Air Force offensive weapon systems, such as F-86 *Sabre* jets and B-45 *Tornado* bombers.⁸⁷ A week after the war started, however, US leaders dispatched a rescue force, consisting of various fixed- wing airplanes and nine H-5 helicopters, into combat.⁸⁸

As the conflict continued, the US Air Force subsequently constructed a capable combat search and rescue force, which eventually rescued or evacuated 9,680 people in Korea.⁸⁹ However, out of the 1,690 US Air Force crewmembers who went down inside enemy territory, the Air Rescue Service saved only 170.⁹⁰ In addition, rescue crews saved an additional 84 non-US Air Force crewmembers behind enemy lines, and 86 airmen within friendly territory.⁹¹ Although the rescue group emerged as the most decorated unit in Korea,⁹² most of their “rescues” consisted of moving wounded soldiers to hospitals, a job later delegated to US Army medical evacuation units. These

⁸⁶ *Microsoft Encarta 97 Encyclopedia*, 1993-1996 Microsoft Corporation. “Korean War.”

⁸⁷ Anderton, 135-136.

⁸⁸ Tilford, 9.

⁸⁹ “Final Score in Korea shows 9,680.” *Air Rescue Service Newsletter*, (Information Services Division, Headquarters Air Rescue Service, Washington DC.: 15 August 1953) 1.

⁹⁰ Tilford, 13.

⁹¹ *Ibid.*

9340 “air ambulance” missions, while unquestionably honorable and often hazardous, were not combat search and rescue missions as defined today.

Figure 9

Casualty evacuation by the 3rd Air Rescue Squadron, Korea. Although much of the legacy and justification for US Air Force combat search and rescue comes from this period, most of these “saves” were medical evacuations, not combat search and rescue missions. Photo courtesy US Air Force museum.

The few actual “behind-the-lines” rescue missions to recover downed pilots were certainly important from a humanitarian standpoint, but of questionable value at the strategic level of war.⁹³ Not unlike World War II, leaders in this conflict clearly placed warfighting and attainment of combat objectives over rescuing downed pilots. In fact, when General MacArthur testified to Congress on the conduct of the Korean War, he never mentioned the Air Rescue Service, but instead remarked, “The only way I know, when a nation wars on you, is to beat her by force.”⁹⁴ This comment, in contrast to those made by Colonel Broughton and General Ryan, demonstrates that General MacArthur focused his efforts on destroying the enemy, and not casualty aversion, force protection, or combat search and rescue.

Post-Korean War

In 1955, while describing new global strategies and thermonuclear weapons, Sir Winston Churchill avowed that “safety will be the sturdy child of terror, and survival the twin brother of annihilation.”⁹⁵ This short statement encapsulated the strategy, known as deterrence, which encouraged US national security decision makers and Air Force leaders to acquire offensive

⁹² *Air Rescue Newsletter*, 15 August 1953, 1.

⁹³ Tilford, 13. In the end, the Air Rescue Service only saved about ten percent of downed US Air Force airmen, plus another 84 other flyers, shot down behind enemy lines.

⁹⁴ Allen Guttman, ed., “Testimony Before the Senate Armed Services and Foreign Relations Committees by Douglas MacArthur” *Korea: Cold War And Limited War* (Washington: D.C. Heath and Company, 1972), 38.

⁹⁵ Anderton, 155.

bombers and missiles capable of delivering nuclear weapons into the Soviet heartland, and interceptors to shoot down enemy bombers attacking the US.

US Air Force leaders considered the SC-47 “rescue airplane” as the only Air Rescue Service asset that clearly fit into this new strategy, and retained it to pick up downed nuclear bomber crews.⁹⁶ These decision makers cut the rest of the Air Rescue Service from 7900 men and 50 squadrons in 1954, to 1,600 men and 11 squadrons in 1961, with the helicopters tasked only for peacetime missions.⁹⁷ An emerging space program, however, prompted the procurement of H-3 support helicopters, an asset that would later prove invaluable to combat search and rescue.

Although much of the literature on combat search and rescue faults US Air Force leaders for allowing the Air Rescue Service to become hollow during this period, one must try to understand the context of the times. Many of these senior airmen had flown in Korea and appreciated the concept of combat search and rescue. However, they were more concerned about global thermonuclear war. US Air Force leaders believed they needed to use their limited funds to acquire offensive weapons that were able to deter the Soviet Union, not a “just in case” combat search and rescue force, expensively standing by if needed.

Vietnam War

The Vietnam War was arguably an anomaly in US history, and one in which US leaders produced some questionable decisions that should not be emulated. In fact, even Ho Chi Minh predicted the upcoming conflict better than US national security decision makers in 1962, stating:

It took us eight years of bitter fighting to defeat [the] French... The Americans are much stronger than the French, though they know us less well. It may perhaps take ten years to do it, but our heroic compatriots in the South will defeat them in the end.⁹⁸

Ho Chi Minh’s prediction was quite accurate. In fact, amid complicated policies, poor objectives, and political constraints, 57,685 Americans were killed, another 153,303 were wounded, and many remain unaccounted for. In

⁹⁶ US Air Force Lieutenant Colonel Bob Hunt, “Combat Search and Rescue: A Future Special Operations Mission?” (Unpublished Research Paper, Air University, Maxwell Air Force Base, Alabama: April 1996), 3.

⁹⁷ Tilford, 15.

addition, an estimated 2 million Vietnamese were killed, 3 million were wounded, and hundreds of thousands of children were orphaned.⁹⁹ Strategically, Vietnam became a war of attrition, while for many individual servicemen and women, it was a one-year struggle for survival.

The nature of this unique war served as the wellspring for the greatest combat aircrew recovery force in the history of aerial warfare. However, many continue to question if what developed was laudable from a warfighter's perspective. Darrel Whitcomb argues that frustrated US leaders in Vietnam knew that saving downed pilots had little impact on the strategic objectives of the war, but they supported combat search and rescue for altruistic reasons. US Air Force rescue crews, in turn, focused on a humanitarian desire to help their fellow aviators. The concept of rescue, coupled with the selfless idea of "doing all for one", insidiously became the quintessential air mission in Southeast Asia.¹⁰⁰

Whitcomb also alleges that US leaders supported combat search and rescue missions at the expense of offensive operations. He describes several missions where leaders diverted all their forces to support combat search and rescue, instead of attacking their targets, and uses the costly rescue of Lieutenant Colonel Icaal "Gene" Hambleton, call sign Bat 21, to validate this claim. Despite the fact that this conflict was a war of attrition, leaders expended 11 US servicemen and several aircraft, plus put hundreds of airmen, a secret commando unit, and even an entire South Vietnamese infantry division at risk during this particular rescue mission.¹⁰¹ Although expending all these assets to save one airman was counter to historical military precedence and logic, it is still lauded by some as "the greatest combat search and rescue effort ever undertaken."¹⁰²

Two dangerous conundrums developed during the war regarding US Air Force combat search and rescue. First, the North Vietnamese and Viet Cong

⁹⁸ Anderton, 167.

⁹⁹ *Microsoft Encarta 97 Encyclopedia*, 1993-1996 Microsoft Corporation, "Vietnam War"

¹⁰⁰ Whitcomb, 138

¹⁰¹ *Ibid.*, ix-xii.

¹⁰² US Air Force Lieutenant Colonel Victor E. Renuart and US Army Lieutenant Colonel Bryan D. Brown, "Combat Search and Rescue: A Search for Tomorrow" (Unpublished Research Paper, US Army War College, Carlisle Barracks, PA: April 1992), 1.

clearly discerned the US commitment to recovering downed crewmembers, and subsequently used them as “bait” in an effort to shoot down even more aircraft. Thus, as US leaders diverted aircraft away from their targets to help rescue downed crewmembers, they inadvertently provided the enemy with a peculiar opportunity to attack US forces on their own terms.

A second conundrum, and one that would affect US Air Force combat search and rescue for the next quarter of a century, concerned the political mishandling of the war. An entire generation of combat aviators, to include future Gulf War strategist Colonel John Warden, progressed through their careers forsworn never to repeat the Vietnam debacle when they became senior leaders.¹⁰³ Meanwhile, the highly decorated rescue pilots and crewmembers who served during the war regarded their contributions as highly successful. These leaders passed on their proud heritage to the next generation of rescue crews, complete with the traditions, legacies, tactics, techniques, and procedures associated with the Vietnam War. In other words, as US Air Force combat search and rescue professionals stagnated in their own success, made possible only by the unique circumstances of this war, the rest of the frustrated, if not defeated US Air Force recommitted itself to becoming more lethal.

From Vietnam to Iran

After Vietnam, and through the Iranian hostage crisis, national security decision makers within the US and Soviet Union continued a vigorous and expensive arms race to avert, or at least prepare for, World War III. US Air Force leaders, recognizing that the quality of their aircraft and missiles had been matched and frequently exceeded by their Soviet counterparts, argued for new programs to increase the effectiveness of their offensive forces.¹⁰⁴

During this period, US Air Force leaders recognized that the Aerospace Rescue and Recovery Service could not provide any offensive advantage, nor counter any Soviet gains in the security matrix; however these leaders allowed it to “hold its own” during the fluctuating budget battles of the Carter

¹⁰³ US Air Force Colonel Edward Mann III, *Thunder and Lightning: Desert Storm and Airpower Debates*, (Alabama: Air University Press, Maxwell Air Force Base, April 1995), 27.

¹⁰⁴ Anderton, 211.

administration.¹⁰⁵ In addition to maintaining combat search and rescue helicopters and HC-130 aircraft worldwide, US Air Force leaders also directed Vietnam-era UH-1 *Huey* helicopters to support nuclear missile bases and provide range support, in addition to retaining a limited combat search and rescue capability. Officially, US Air Force leaders allowed this robust rescue force to exist because it fit into the national security strategy of “flexible response.”¹⁰⁶ More importantly, however, this organization had performed superbly in Vietnam, and even though it had no offensive capability and contributed little to national defense, US national security decision makers and appreciative airmen still allowed it to bask in the political limelight.

This limelight quickly dimmed on the morning of 25 April 1980, however, when the world awoke to the news of the failed hostage rescue attempt in Iran. A crash in the Iranian desert claimed eight US servicemen, cost 193 million dollars, tarnished US prestige and reputation for military skill and power, and became an important consideration during the 1980 presidential election.¹⁰⁷

With this new development, many US leaders immediately divested themselves of supporting rescue resources, and instead focused on creating offensive capabilities. US military leaders were subsequently charged to fight and win throughout the spectrum of conflict, even if the next “war” was to be another high-visibility hostage rescue. The solution was to immediately bolster special operations, at the expense of US Air Force combat search and rescue.¹⁰⁸

Figure 10

Failed rescue mission in Iran. Iranian soldiers survey the wreckage of the aborted US military attempt to rescue hostages in the US Embassy in Tehran. Following this, US national security decision makers immediately began bolstering special operations, at the expense of combat search and rescue. Photo courtesy special operations.com.

¹⁰⁵ Hunt, 4.

¹⁰⁶ Ibid.

¹⁰⁷ US Air Force Major Timothy Leahy, “The Future of USAF Combat Search and Rescue,” (Unpublished Research Paper, School of Advanced Airpower Studies, Maxwell Air Force Base, Alabama: June 1998), 46.

¹⁰⁸ Hunt, 5.

From Iran to the Pre-Gulf War

Following the Iranian hostage crisis, US policy makers were confronted with a number of international problems that required military intervention. For example, US leaders dispatched a military force to Grenada in 1983 to rescue medical students and restore order.¹⁰⁹ In addition, in 1987 the US deployed an Army special operations task force to the Persian Gulf, to conduct clandestine night operations and provide over-water combat search and rescue amid heightened tensions in the Middle East.¹¹⁰ Finally, US leaders ordered forces to Panama in 1989 to apprehend Manuel Noriega and restore a democratically elected government.¹¹¹ Except for a few individual participants, US Air Force combat search and rescue forces did not participate in any of these contingencies.

The Iranian hostage crisis had set a series of actions in motion, which resulted in the eventual “gutting” of US Air Force conventional combat search and rescue forces during this period. 240 US Air Force rescue HH-60D *Night Hawk* helicopters, on order since 1977 finally made the President’s 1984 budget, but were reduced to 155 in 1985, 90 in 1986, and then cancelled altogether in 1987 before any were delivered.¹¹² In addition, US Air Force officials directed the transfer of nine MH-53 *Pave Low* helicopters from the Aerospace Rescue and Recovery Service to the 1st Special Operations Wing immediately after the crisis, and by 1988 had directed all remaining HH-53 *Super Jolly Green Giant* rescue helicopters to join special operations.¹¹³

Organizationally, US national security decision makers dismantled the Aerospace Rescue and Recovery Service in 1983, by merging it with special operations to form 23rd Air Force. Most rescue assets remained in place, but were administratively assigned to the small 41st Rescue and Weather

¹⁰⁹ Joel Nadel with J.R. Wright, *Special Men and Special Missions* (London: Greenhill Books and Stackpole Books, 1994), 95-96.

¹¹⁰ “Black Hawk In Action” Lkd. *Sikorsky Programs*, No date, <<http://www.sikorsky.com/programs/blackhawk/inaction.html>>, (6 February, 1999)

¹¹¹ United States Special Operations Command History and Research Office, *United States Special Operation Command 10th Anniversary History* (MacDill Air Force Base, Florida, 16 April 1997), 17.

¹¹² US Air Force Audit Agency, *Air Force Management of Air Rescue and Recovery Forces*, (California: Norton Air Force Base, 4 May 1989) 3.

¹¹³ Hunt, 5.

Reconnaissance Wing in California.¹¹⁴ From the outset, however, special operations leadership wanted this numbered air force “purified” of its non-special operations elements.¹¹⁵ In a desperate response to the “divestiture” of combat search and rescue assets out of special operations, the tiny US Air Force Rescue Coordination Center at Scott Air Force Base was designated as the Aerospace Rescue and Recovery Service, simply to preserve the command title, flag, and heritage.¹¹⁶

US Air Force leaders had once again allowed combat search and rescue capabilities to disintegrate. These leaders were not necessary malevolent toward this humanitarian mission, however in an almost “zero-sum-game” of budgeting, national security concerns took a higher priority. In fact, these leaders established US Special Operations Command in 1987, then Air Force Special Operations Command three years later, complete with a robust helicopter and C-130 force structure.¹¹⁷

Pre-Gulf War

On the eve of the Gulf War, US leaders finally noted that combat search and rescue within the US Air Force had deteriorated to an unacceptable level. In fact, theater Commander-in-Chiefs generated a 1988 requirement for combat search and rescue, prompting General Duane Cassidy, commander of the US Air Force Military Airlift Command to comment: “Our rescue resources have slowly declined to the point that we only have a limited capability.”¹¹⁸

Officers assigned to the Air Staff at the Pentagon, Military Airlift Command, and several other organizations were subsequently instrumental in the reestablishment of an Air Rescue Service on 8 August 1989. In addition, these combat search and rescue advocates were able to negotiate a modest purchase of HH-60G *Pave Hawk* helicopters, in lieu of the cancelled HH-60D

¹¹⁴ US Air Force Major (Retired) Hal Tiahrt, former HH-53 *Super Jolly Green Giant* helicopter pilot, heavily involved in rescue/special operations testing during this period. Telephone interview with author, 6 February, 1999.

¹¹⁵ *United States Special Operation Command 10th Anniversary History*, 9.

¹¹⁶ US Air Force Major (now Colonel) Gary Copsey, “Rebuilding the Air Rescue Service: Re-emergence of the Pregnant Angel” *Airlift, The Journal of the Airlift Operations School*, (Headquarters Military Airlift Command, Scott Air Force Base, Illinois: Fall 1989) 8.

¹¹⁷ *United States Special Operation Command 10th Anniversary History*, 9.

¹¹⁸ US Air Force Major (now Lieutenant Colonel) Joseph J. Falzone, *Combat Search and Rescue; CSEL Enhancements for Winning Air Campaigns*, (Alabama: Air University Press, Maxwell Air Force Base, 1997), 54

Night Hawk program. These helicopters, unofficially dubbed *Evening Hawks* because of their reduced capabilities, became the primary US Air Force combat search and rescue platform of the future.

Gulf War

When the Gulf War began on 17 January 1991, some 500,000 allied soldiers challenged approximately 540,000 well entrenched Iraqi troops.¹¹⁹ However, by unleashing a massive offensive air attack, allied forces destroyed 48 percent of Iraqi artillery, 39 percent of its tanks, and 32 percent of its armored personnel carriers in the Kuwait Theater of Operations in 39 days.¹²⁰ The “100-hour” ground war, beginning on 24 February, finished the job. There were surprisingly few allied losses.

Despite the effort to build a functional US Air Force combat search and rescue force before the Gulf War, it was too little and too late. At the start of the war, no active duty HC-130 rescue squadrons existed, and only one active duty HH-60G *Pave Hawk* helicopter unit had been established in Korea.¹²¹ A rescue squadron was forming at Nellis Air Force Base Nevada, but it would remain non-combat capable until December 1992. As the war began in January 1991, 17 antiquated H-3 *Jolly Green Giant* helicopters of the Air Rescue Service made up the bulk of US Air Force combat search and rescue forces.¹²² None of them, however, deployed to the Gulf War with their Air Force Special Operations Command counterparts.



Figure 11
Pararescueman, Circa 1967, in front of an H-3 *Jolly Green Giant* helicopter. 17 of these antiquated aircraft made up the bulk of US Air Force combat search and rescue forces at the start of the 1991 Gulf War. Photo courtesy Jolly Green Association.

¹¹⁹ Microsoft Encarta 97 Encyclopedia, 1993-1996 Microsoft Corporation. “Persian Gulf War.”

¹²⁰ Norman Cigar, “Iraq’s Strategic Mindset and the Gulf War: Blueprint for Defeat”, *Journal of Strategic Studies*, volume 15, number 1: March, 1992, 21.

¹²¹ US Air Force Lieutenant Colonel Joseph J. Falzone, MH-60G *Pave Hawk* helicopter pilot, and member of the Air Staff during this period. <falzonej@58sowgate.irk.aetc.af.mil> “Re: Question”, Transmitted 4 February 1999. Personal e-mail received 5 February 1999.

US national security decision makers had rendered the highly decorated airmen of the Air Rescue Service professionally ineffective. At their expense, these leaders created Air Force Special Operations Command, and equipped it with a robust special operations fleet. Instead of supporting an altruistically based rescue force, these policy makers elected to invest in assets capable of applying force, offensively and unconventionally, upon an enemy. However, as Captain Trask and his crew demonstrated during the war, these special operations assets could also provide a viable combat search and rescue capability.

Post-Gulf War

The disintegration of the Soviet Union, coupled with the defeat and permanent air occupation of Iraq, required US leaders to focus on new and complex security challenges. In addition to enforcing the no-fly zones in Northern and Southern Iraq, the United States was forced to contend with emergent challenges, such as such as Somalia in 1992, Haiti in 1995, and an air threat in Bosnia that downed Captain Scott O'Grady on 2 June 1995.¹²³ US political and military leaders discovered that rogue nations and leaders, unrestrained by former coercive superpowers, were more willing to use force within and across borders.¹²⁴

The Air Rescue Service fell short during the Gulf War, but its members worked to resurrect a viable US Air Force combat search and rescue force for the future. Shortly after the war, they established several HH-60G *Pave Hawk* combat search and rescue squadrons, an HC-130 rescue tanker unit, and set the foundation for a division at the US Air Force Weapons School. In fact, in February 1993, the Air Rescue Service was finally able to activate a provisional HH-60G *Pave Hawk* rescue squadron in Kuwait, to provide combat search and rescue coverage to aircraft flying over southern Iraq. These rescue crews relieved an MH-53J *Pave Low* special operations unit that had been providing this coverage for two years.

¹²² Copsey, 8.

¹²³ "Captain Scott O'Grady", *Aeronautics Learning Laboratory for Science, Technology and Research*, NASA, 26 October 1998, <<http://www.allstar.fiu.edu/aero/OGrady.htm>>, (7 February, 1999).

¹²⁴ "The Geostrategic Environment and its Implications for Land Forces," *Army Vision 2010*, No date, <http://www.army.mil/2010/geostrategic_environment.htm>, (20 January 1998).

Just as the Air Rescue Service seemed to be making progress, however, the US Air Force Chief of Staff directed it be disbanded, in an overall effort to streamline the service. US Air Force combat search and rescue resources were immediately scattered throughout various major commands, and subsequently began spending their energies on reestablishing an identity within their new parent units. As these combat search and rescue units reorganized, Air Force Special Operations Command continued to provide worldwide combat search and rescue, again at the expense of their special operations missions.

US Air Force Combat Search and Rescue and the New Millenium

Regional threats and increased tensions around the globe have recently refocused senior leaders on the issue of combat search and rescue. Air Combat Command became the “executive agent” for combat search and rescue, and in turn established the Joint Combat Rescue Agency as an action office. This agency subsequently created and staffed an initiative to build an administrative mechanism to “fix rescue.”¹²⁵ This move ultimately led to the establishment of a personnel recovery division within the operations and training directorate of the Air Staff in October 1999, dedicated exclusively to work personnel recovery issues and advocate for combat search and rescue. In addition, combat search and rescue professionals are also pursuing the establishment of a similar joint organization at US Atlantic Command.¹²⁶

Nevertheless, the US Air Force will enter the new millenium with a combat search and rescue force in need of serious attention. In fact, in addition to the problems uncovered during the 1997 Veda study, a recent accident investigation involving the crash of two HH-60G *Pave Hawk* helicopters assigned to a US Air Force combat search and rescue unit in Nevada, in which 12 airmen were killed, also suggests serious problems within the conventional combat search and rescue community.

¹²⁵ US Air Force Major John Cannafax, Joint Combat Rescue Agency, <john.cannafax@langley.af.mil>, “RE: document”, Transmitted 24 January 1999. Personal e-mail received 24 January 1999.

¹²⁶ US Air Force Lieutenant Colonel Robert Donnelly, Joint Combat Rescue Agency. Telephone interview with author, 15 May 1999.

Figure 12

Mishap site in Nevada. 12 US Air Force combat search and rescue crewmembers were killed here, when their two HH-60G *Pave Hawk* helicopters collided on 4 September, 1998. A subsequent accident investigation uncovered a number of findings, suggesting serious problems within the conventional combat search and rescue community. Photo courtesy US Air Force.

In an *Air Force Times* article entitled “Worked to Death”, Bryant Jordan reports that accident investigators uncovered “bad morale, increasing training burdens, leadership problems, and work that simply didn't get done.”¹²⁷ In fact, Jordan quotes a senior pilot as telling accident investigators:

We are deployed so often that we never have enough time to get all the training done that we need. You return from deployment and are trying to play catch up. The people that remain behind on deployments are working twice as hard to take care of business. It all falls under training. We aren't getting quality people into the unit, we have to train them in the unit, and we don't have the resources for it.¹²⁸

Jordan published a second article a week later, alleging that these problems are not simply isolated to this one unit. He stated that the combat search and rescue community has problems in mission qualification training, low flight time, and operations tempo. In fact, he quotes a pilot from an entirely different US Air Force combat search and rescue squadron as remarking:

I'm not sure if the findings are a whole lot different than we've seen before. Ops tempo, doing more with less. [sic] People have seen it, but there's no way to avoid it because you have to get the job done. You have to fly. Unless you don't want to fly.”¹²⁹

Meanwhile, Air Force Special Operations Command continues to provide conventional combat search and rescue coverage worldwide. In fact, an Air Force Special Operations Command official recently briefed the Commander-in-Chief, US Special Operations Command:

¹²⁷ US Air Force Captain Grant Dysle, as quoted by Bryant Jordan, “Worked to death: How doing too much caused 12 crewmembers their lives”, *Air Force Times*, 29 March 1999, 13.

¹²⁸ US Air Force Major Tracy Coleburn, as quoted by Bryant Jordan, 13.

¹²⁹ US Air Force Captain Mike Day, as quoted by Bryant Jordan, “Search-and-rescue advocate promises to get back on track”, *Air Force Times*, 5 April 1999, 12.

This is the reality of today's current organization. Although the Air Forces' rotary-wing rescue assets outnumber us by 2 to 1, we continue to fill 70 percent of the worldwide combat search and rescue contingency taskings. Air Force special operations forces have been the force of choice to provide combat search and rescue coverage to Combined or Joint Task Force commanders. There is no reason to believe that this will change in the future.¹³⁰

Almost a century of history suggests that there is little reason for encouragement regarding the prognosis for combat search and rescue within the US Air Force, despite recent efforts or immediate "fixes" the tragedy in Nevada may set in motion. Combat search and rescue has always been marked by a lack of capability prior to hostilities, followed by an effort to build up forces during combat or crisis. History therefore suggests that any interest in combat search and rescue is simply another temporary upswing in a predictable sine wave, encouraged by special circumstances and current events. While this chapter describes this phenomenon from a historical perspective, the next chapter will explore deeper why this condition persists.

¹³⁰ US Air Force Colonel Jim Sills, representing Air Force Special Operations Command, delivered this briefing to General Hugh Shelton, Commander in Chief, US Special Operations Command on 28 February 1997, then General Richard Hawley, Commander, Air Combat Command on 7 May 1997. Sillsj@Hurlburt.af.mil, "RE: Research Update", Transmitted 5 February 1999. Personal e-mail received 5 February 1999.

Chapter 4

Theory, Doctrine, and Combat Search and Rescue

The time will come when people will not listen to sound doctrine, but will follow their own desires and will collect for themselves more and more teachers who will tell them what they want to hear. They will turn away from listening to the truth and give their attention to legends.

— II Timothy 4: 2-4

Introduction

Reflecting on the tumultuous history of combat search and rescue, it seems apparent that yet another transient anomaly exists regarding force protection, casualty aversion, and combat search and rescue. This anomaly has occurred for several complex reasons, emerging as a consequence of the unique circumstances of the day.

Some believe the shoot-down of Captain Scott O' Grady provided a catalyst for US policy makers and defense planners to refocus on combat search and rescue.¹³¹ Another thought is that a generation of airmen, enforcing no fly zones over Iraq, have been inculcated with the idea that if their aircraft goes down in hostile territory, it is certain that a combat search and rescue effort will immediately take precedence over everything else.¹³² Finally, Colonel John Warden relates in his book *The Air Campaign*, that such a capability to save downed flyers remains the exception, but is supportable if an air force is "operating without time constraints and can afford to devote a significant portion of its daily sorties to rescue operations."¹³³

Regardless of the reasons, this anomaly has prompted senior leadership to yet again consider bolstering conventional combat search and rescue forces within the US Air Force. In fact, a recent article in *National Defense* relates:

¹³¹ Greg Alan Caires, "Advanced Aircraft Bolster Search, Rescue Capability", *National Defense*, February 1999, 28.

¹³² US Air Force Lieutenant Colonel (Retired) John Guilmartin, Vietnam veteran, former combat search and rescue pilot, Ph.D., and currently associate professor of history, Ohio State University. "Combat Search and Rescue in Vietnam" Lecture, Air Command and Staff College, Maxwell Air Force Base, Alabama. During this lecture, a number of pilots in the audience made comments supporting this assertion, with one stating, "If something were to ever happen, everything would be on hold until that guy gets picked up."

¹³³ US Air Force Colonel John Warden, *The Air Campaign, Planning for Combat* (Washington, D.C.: National Defense University Press, 1988), 43.

“But despite the expense in time and resources, and the risks rescuers face, the Air Force is as willing to aggressively conduct rescue missions as it was in CSAR’s [combat search and rescue’s] golden age during the Vietnam War.”¹³⁴

This current interest may be welcomed by individual crewmembers, conventional combat search and rescue advocates, and various industries that market lifesaving equipment; however, their enthusiasm should be curbed for several reasons. First, history suggests that this trend is only temporary, and will be tempered when national security decision makers are seriously challenged with a credible threat or constrained spending. Secondly, the “golden age of combat search and rescue” was a byproduct of unique conditions associated with the mishandling of the Vietnam War, a scenario that hopefully will not be emulated. Finally, despite the current interest in combat search and rescue, US national security decision makers will eventually recognize that pursuing combat search and rescue assets, at the expense of offensive weapons and missions, would be counter to the realities of warfighting in a fiscally constrained environment. Like their predecessors, these leaders will eventually ascertain that maintaining an expensive organization, dedicated solely to conventional combat search and rescue, is inherently counter to the “true goal of the art of war.”¹³⁵

To illustrate this disharmony, one can compare the concept of combat search and rescue to a concise sample of classical war and airpower theories, as well as US Air Force basic doctrine. In the end, one should understand why US Air Force leaders would be more satisfied with, and thus more willing to permanently support a multifaceted force capable of conducting offensive operations, as well as combat search and rescue.

Theory and Combat Search and Rescue

Dr. Harold Winton, Professor of Military History and Theory at the School of Advanced Airpower Studies, defines theory as “a codified, systematic body of propositions, regarding a particular field of knowledge.”¹³⁶ Although Dr.

¹³⁴ Caires, 28.

¹³⁵ Carl Von Clausewitz, *On War*, 1984 ed. (New York: Alfred A. Knoph, Inc. 1993), 75.

¹³⁶ Dr. Harold Winton, “The Nature of Military Theory: Clausewitz” Lecture, School of Advanced Airpower Studies, Maxwell Air Force Base, Alabama: 17 August 1998.

Winton states that people have many different views on the utility of war and airpower theory, he believes that “theory can sharpen ones power of judgment, depending on the intelligence of the strategist.”¹³⁷

One could spend a lifetime studying the many ideas on war and airpower theory. However, only a brief exposure to two noted theorists, Prussian General Carl Von Clausewitz and Italian airpower advocate Giulio Douhet, will suffice to illustrate that combat search and rescue concepts not only deviate from generally accepted war and airpower assumptions, but in many cases directly conflict with them.

War Theorist Carl Von Clausewitz

Figure 13
Carl Von Clausewitz. (1780-1831). Arguably one of the most important, and most frequently cited military theorists. Photo courtesy US Air Force School of Advanced Airpower Studies.

Carl Von Clausewitz, Prussian Officer and veteran of many battles, compiled a number of thoughts on war during his lifetime, of which his widow later collected and published in 1832.¹³⁸ This collection became the basis for the book *On War*, which molded European military ideology in the era preceding World War I.¹³⁹ Obviously, Clausewitz never saw people in flying machines, nor considered the concept of combat search and rescue. However, a review of his timeless work can still help one predict how he might regard these issues today.

First, Clausewitz advocated that there are times when a leader should preserve military forces. However, his desire to preserve the lives of soldiers was not driven by an altruistic desire to avoid bloodshed, but rather to conserve combat power and prepare for a decisive moment to launch offensive operations. In addition, he believed that preserving forces could prolong a war

¹³⁷ Ibid.

¹³⁸ Clausewitz, 67.

¹³⁹ Sun Tzu, *The Art of War* (Translated by Samuel B. Griffith, Oxford Press, 1963), inside jacket cover.

and frustrate an enemy into exhaustion.¹⁴⁰ A modern-day Clausewitz might support retrieving downed aircrews so they could fight again, however as noted previously, this notion with respect to combat search and rescue is not entirely plausible.

Secondly, it is unlikely Clausewitz would support an altruistically based force, dedicated to making war more humane or increasing the morale of individual combatants. He wrote, "Kind-hearted people might of course think there was some ingenious way to disarm or defeat an enemy without too much bloodshed, and might imagine this is the true goal of the art of war. Pleasant as it sounds, it is a fallacy."¹⁴¹ Not once in his 732 page book does Clausewitz mention casualty aversion, or retrieving injured or isolated soldiers from the battlefield.

Finally, Clausewitz would most likely balk at the events associated with "the golden age of combat search and rescue", of which Darrell Whitcomb alleges that saving lives became the primary air mission of the Vietnam War.¹⁴² Clausewitz wrote, "If our main concern is to preserve our forces...it would lead our forces to disaster. A great many Generals have failed through this mistaken assumption."¹⁴³ Evidence suggests that Clausewitz might support saving downed pilots and crewmembers, if there were unique political advantages associated with doing so; however, it is unlikely he would support this as "the true goal of the art of war."¹⁴⁴

All theories must be viewed critically, and the writings of Clausewitz are no exception. In fact, some of his critics cite his writings as outdated and obsolete. For example, British historian Basil Liddell Hart routinely criticized Clausewitz in many of his publications, and noted military historian John Keegan similarly critiqued his work in his 1993 book, *A History of Warfare*.¹⁴⁵ These critics assert the world has changed too much for Clausewitz to still be relevant.

¹⁴⁰ Clausewitz, 98.

¹⁴¹ Ibid., 75.

¹⁴² Darrel D. Whitcomb, *The Rescue of Bat 21*, (Maryland: Naval Institute Press, 1998), 141.

¹⁴³ Clausewitz, 98.

¹⁴⁴ Ibid., 75.

¹⁴⁵ Christopher Bassford, "John Keegan and the Grand Tradition of Trashing Clausewitz" *War in History*, v.1, no.3 (November 1994), 319-336.

While it is true that the world has changed greatly since Clausewitz theorized on war, basic human nature has changed little.¹⁴⁶ Although technology, such as airplanes, radar, and helicopters, coupled with unique political concepts such as no-fly zones and air occupation, are issues that Clausewitz could not have imagined, his basic strategic paradigms remain solid.¹⁴⁷ Therefore, after a careful analysis of his theory, one could logically deduce that if a modern day Clausewitz were convinced that a need existed to save downed aircrews, he would probably find a multifaceted force, capable of providing offensive capabilities as well as combat search and rescue most palatable.

Airpower Theorist Giulio Douhet

Figure 14
Giulio Douhet, (1869-1930). Douhet argued
that airpower is inherently offensive. Photo
courtesy Dr. David Mets.

Giulio Douhet was born in 1869, served as an Italian artillery officer, then commanded an aviation battalion before World War I.¹⁴⁸ The subsequent carnage of the Great War influenced Douhet, prompting him to imagine ways to prevent another lengthy war of attrition. Although never a pilot, he believed the effective employment of airpower would result in a quick and decisive victory. In 1921, Douhet published his classic book, *Command of the Air*, then generated a supplemental section in 1926. After reviewing his theory of airpower, one could logically deduce that Douhet would select offensive airpower assets over combat search and rescue forces. In fact, evidence suggests several reasons why he might even criticize an altruistically based combat search and rescue force.

¹⁴⁶ Dr. Michael I. Handel, "Is *On War* Obsolete?" Lecture, US Naval War College, Newport, RI: 6 November 1997.

¹⁴⁷ Ibid.

First, Douhet condemned leaders who maintained airpower assets in defensive, not offensive roles. For example, he criticized the concept of pursuit planes, which passively roamed the sky, waiting for the enemy to initiate an encounter: “The pursuit plane [is] forced to play a passive role instead of seeking out the enemy on his own grounds.”¹⁴⁹ It is likely that Douhet would probably find a robust combat search and rescue force, passively waiting for an enemy action to cause it to react, unacceptable.

Secondly, Douhet would probably not financially support an expensive combat search and rescue force structure. He strongly advocated for offensive air operations, and considered auxiliary aircraft “worthless, superfluous, and harmful.”¹⁵⁰ In the context of procuring aircraft for offensive operations, versus purchasing auxiliary aircraft for support missions, he wrote, “Whatever resources, of men, money, and equipment, are diverted from the strengths and essential purpose...will result in slowing down of the conduct of the war and delaying its final outcome.”¹⁵¹

Finally, it is unlikely that Douhet would support a force structure dedicated to saving downed airmen in war, and certainly improbable that he would divert combat aircraft from offensive operations to support combat search and rescue missions. In fact, he argued for a massed aerial attack early in a war, leaving nothing behind to protect his own cities from offensive attacks. He reasoned, “We must therefore resign ourselves to the offenses the enemy inflicts upon us, while striving to put all our resources to work to inflict even heavier ones upon him.”¹⁵² It would be logical therefore to assume that if he did not sanction diverting resources to protect his own citizens, he certainly would not approve of diverting combat assets to save downed airmen.

Again, all theories must be viewed critically, and some of Douhet’s ideas were either flawed or overcome by events. For example, his ideas on terror bombing civilians are widely criticized, and even when used in World War II,

¹⁴⁸ David R. Mets, *The Air Campaign; John Warden and the Classical Airpower Theorists* (Alabama: Air University Press, Maxwell Air Force Base, December 1998), 11.

¹⁴⁹ Giulio Douhet, *The Command of the Air*, USAF Warrior Studies, eds. Richard H. Kohn and Joseph P. Harahan (new imprint, Washington D. C.: Office of Air Force History, 1983) 43.

¹⁵⁰ *Ibid.*, 94-95.

¹⁵¹ *Ibid.*, 59.

¹⁵² *Ibid.*, 55.

did not achieve the expected results.¹⁵³ In addition, many B-17 crews in World War II fatally invalidated his assertion that a heavily armed “battle plane” would always get through. Finally, one could label Douhet an extremist, and charge that he could never embrace the concept of combat search and rescue.

Despite his flaws, however, many of his ideas remain relevant. For example, his idea to use a massive amount of aerial resources early proved effective on the opening night of the Gulf War, in which airmen from all military services and 10 nations launched an unprecedented aerial attack against Iraq.¹⁵⁴ In addition, his ideas on the ramifications associated with diverting scarce resources from offensive operations are equally valid. For example, it is likely that US leaders in Vietnam, who routinely diverted attacking aircraft on their way to their targets to support combat search and rescue missions, prompted an adverse effect on operational and strategic objectives. From an acquisition standpoint, his argument that “everything not put into [offensive bombers] is a diversion that weakens the main effort and reduces the probability of success” also appears valid, especially in a resource-constrained environment.¹⁵⁵

In the end, it appears that Douhet, as well as most war and airpower theorists, tend to favor hurting an enemy over saving their own combatants. Therefore, since theory should contribute to the formulation of doctrine, one could predict that US Air Force basic doctrine reflects a similar theme.

Air Force Basic Doctrine and Combat Search and Rescue

In 1968, General Curtis LeMay wrote:

At the heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and knowledge reinforced by experience which lays the pattern for the utilization of men, equipment, and tactics. It is the building material for strategy. It is fundamental to sound judgment.¹⁵⁶

¹⁵³ Mets, 17.

¹⁵⁴ Colonel Edward C. Mann III, *Thunder and Lightning: Desert Storm and the Airpower Debates*, (Alabama: Air University Press, Maxwell Air Force Base, December 1998), ix.

¹⁵⁵ Mets, 15.

¹⁵⁶ General Curtis Emerson LeMay as quoted by Dr James A. Mowbray, “Air Force Doctrine Problems 1926-Present” *Airpower Journal*, Winter, 1995, 21.

Dr. Winton tends to echo the remarks of General LeMay, written over thirty years ago, in emphasizing that doctrine is a “statement of *officially sanctioned* beliefs and principles.”¹⁵⁷ In fact, the US Air Force regards basic doctrine as “the most fundamental and enduring beliefs that describe and guide the proper use of air and space forces in military action.”¹⁵⁸

US Air Force basic doctrine is comprised of principles of war, tenets of airpower, core competencies, and basic functions. Principles of war are defined as “a set of general principles or rules for scientific derivation and universal application.”¹⁵⁹ In combination with these principles of war are tenets of airpower. US Air Force doctrine maintains that tenets of airpower are “the fundamental guiding truths of air and space power employment.”¹⁶⁰ Core competencies are not doctrine *per se*, but are the “enablers” of US Air Force basic doctrine, and thus translate central beliefs into operational concepts.¹⁶¹ Finally, basic functions are the broad, fundamental, and continuing activities of air and space power, and together serve as the means by which service forces accomplish assigned missions.¹⁶²

In addition to basic doctrine, the US Air Force publishes operational doctrine, tactical doctrine, and a plethora of regulations, instructions, propositions, and other documents concerning the employment of airpower at various levels. However, to understand the dichotomy that has developed between airmen who think about war, and those who think about preserving life, and to help understand how these two can finally be brought together, only US Air Force basic doctrine, as found in the 1997 edition of Air Force Doctrine Document 1, *Air Force Basic Doctrine*, need be explored.

¹⁵⁷ Dr. Harold Winton, “The Nature of Military Theory: Clausewitz” Lecture, School of Advanced Airpower Studies, Maxwell Air Force Base, Alabama: 17 August 1998.

¹⁵⁸ US Air Force, *Air Force Basic Doctrine*, Air Force Doctrine Document 1 (Washington: September 1997), 2.

¹⁵⁹ David S. Fadok, “John Boyd and John Warden: Airpower’s Quest for Strategic Paralysis”, The School of Advanced Airpower Studies and Philip S. Meilinger, ed., *The Paths of Heaven: The Evolution of Airpower Theory* (Alabama: Air University Press, Maxwell Air Force Base, 1997), 379.

¹⁶⁰ Air Force Doctrine Document 1, 22.

¹⁶¹ *Ibid.*, 27.

¹⁶² *Ibid.*, 45.

Doctrine, Strategy, and War

US Air Force basic doctrine tends to echo the writings of Clausewitz with respect to the vociferous nature of warfare. For example, it notes that the political nature of war, coupled with the physical stress and agony of combat, will outlive any technological attempt or fervent desire to make it bloodless and devoid of violence.¹⁶³ In fact, US Air Force basic doctrine states that the fundamental nature and risks of warfare, to include suffering casualties, may occur in virtually any type of operation.¹⁶⁴ Combat search and rescue forces may abate some of these casualties, but it cannot change this inherent precept of war.

In addition, US Air Force basic doctrine echoes some of the writings of Douhet, in that minimal combat power should be devoted to secondary objectives. Unlike Douhet, however, US Air Force basic doctrine does not describe auxiliary aircraft as “worthless, superfluous, and harmful.”¹⁶⁵ Rather, it states, “The overriding objective of any military force is to be prepared to conduct combat operations in support of national political objectives--to conduct the nation’s wars.”¹⁶⁶ Conventional combat search and rescue forces, auxiliary aircraft in the Douhetian sense, can support decisive combat operations, but they are not trained, organized, or equipped to conduct these combat operations themselves, nor can they deliver offensive firepower against an enemy during the nation’s wars.

Moreover, there are several principles of war within US Air Force basic doctrine which also tend to weaken the argument for a dedicated combat search and rescue force. For example, the principle of offense holds that acting, rather than reacting, allows a warrior to dictate the time, place, purpose, scope, intensity, and pace of operations.¹⁶⁷ In addition, this principle notes that air and space forces are best used as offensive weapons, which can subsequently provide Joint Force Commanders with an outstanding resource to seize the initiative.¹⁶⁸ Airpower, as US Air Force basic

¹⁶³ Ibid., 6.

¹⁶⁴ Ibid., 9.

¹⁶⁵ Douhet, 94-95.

¹⁶⁶ Air Force Doctrine Document 1, 7.

¹⁶⁷ Ibid., 14.

¹⁶⁸ Ibid., 15.

doctrine advocates, can force the enemy to react rather than act, deny him the initiative, then shape the remainder of the conflict.¹⁶⁹

In violation of this principle, however, combat search and rescue assets are inherently reactionary, and only respond when the enemy dictates. Moreover, conventional combat search and rescue forces are not trained, organized, or equipped to conduct offensive operations, and do not provide Joint Force Commanders with many options other than retrieving downed crewmembers. Worse still, expensive military aircraft and highly trained crewmembers, dedicated to conventional combat search and rescue, are not routinely employed to their full offensive potential.

A second principle of war, economy of force, calls for the rational use of force by selecting the best mix of combat power.¹⁷⁰ This principle also advocates that, to ensure overwhelming combat power is available, minimal combat power should be devoted to secondary objectives. In fact, US Air Force basic doctrine warns that the greatest vulnerability of air and space power employment is its misuse or misdirection, which can reduce its contribution even more than enemy action.¹⁷¹

Again, this principle of war suggests that anchoring multimillion-dollar airframes and highly trained crews to static positions, where they maintain a reactive versus a proactive posture, would be a misuse or misdirection of airpower. Although special circumstances may warrant parceling out some offensive airpower assets to this mission, the creation of a robust combat search and rescue force, unable to contribute at all to delivering combat power, would therefore be a violation of this principle.

Finally, the principle of objective, which is concerned with directing military operations toward a defined and attainable end state, is also a part of US Air Force basic doctrine.¹⁷² In fact, the doctrine warns that airmen should “concentrate on theater or campaign priorities, while avoiding the siphoning of force elements to fragmented objectives.”¹⁷³

¹⁶⁹ Ibid., 15.

¹⁷⁰ Ibid., 18.

¹⁷¹ Ibid.

¹⁷² Ibid., 11.

¹⁷³ Ibid., 13.

Like the principles of offense and economy of force, the concept of combat search and rescue violates this principle of war to various degrees. For example, directing airpower assets into a passive combat search and rescue posture violates this principle at the tactical and operational levels of war, as it siphons off force elements from pursuing objectives. On a larger scale, retaining an entire conventional combat search and rescue force, at the expense of ostensibly more offensive forces, would place this violation more at the national security and strategic level.

In addition to principles of war, the tenets of airpower, core competencies, and air and space power functions, as found in US Air Force basic doctrine, provide more evidence which suggests that a dedicated combat search and rescue force is wrongheaded. For example, the concept of flexibility suggests that airpower should be able to quickly shift from one campaign objective to another with decisive results.¹⁷⁴ Indeed, the A-10 *Thunderbolt II*, considered a close air support platform, conducted many interdiction missions during the Gulf War. In addition, the F-111 *Aardvark*, optimized for long-range, deep interdiction missions, destroyed hundreds of Iraqi tanks and armored fighting vehicles.¹⁷⁵ As for helicopters, MH-53J *Pave Low* helicopters led AH-64 *Apache* attack helicopters to targets, flew rescue missions, and searched for mobile Scud launchers.¹⁷⁶ In contrast, a conventional combat search and rescue force, trained, organized, and equipped for primarily one mission, does not exploit this tenet of airpower.

Core competencies also tend to support a multifaceted capability over a conventional combat search and rescue force. For example, under precision engagement, US Air Force basic doctrine mentions that special operations forces can be employed in small-scale but precise operations.¹⁷⁷ In addition, under rapid global mobility, the doctrine states that airpower assets “can transit global distances in minimum time to directly achieve strategic objectives, whether to dissuade, deter, contain, inhibit, disrupt, destroy,

¹⁷⁴ Ibid., 23.

¹⁷⁵ Ibid.

¹⁷⁶ United States Special Operations Command History and Research Office, *United States Special Operation Command 10th Anniversary History* (MacDill Air Force Base, Florida, 16 April 1997), 38.

¹⁷⁷ Air Force Doctrine Document 1, 30.

supply, or support.”¹⁷⁸ A quick-reaction special operations force can achieve all of these objectives, in addition to combat search and rescue upon arrival. Conventional combat search and rescue forces, however, can only accomplish the latter.

Finally, out of the 17 air and space power functions described in US Air Force basic doctrine, combat search and rescue is listed as number 15, nesting above navigation and positioning, and weather services. In addition, a review of the other air and space power functions reveals terms such as destruction, neutralization, suppression, defeating, interdicting, and striking enemy centers of gravity. In contrast to these warfighting terms, the combat search and rescue paragraph uses terms such as “recover, sustaining morale, and preserve.”¹⁷⁹

Obviously, US Air Force basic doctrine does not overtly state that the concept of combat search and rescue is counter to practically all plausible war and airpower theories, as well as a violation of several principles of war, tenets of airpower, core competencies, and basic functions. Moreover, since it is not the job of combat search and rescue forces to destroy, neutralize, or defeat things, it is unfair to criticize them for not sporting these descriptions. However, one must realize after reviewing theory and doctrine, that the mission of the US Air Force does not center on combat search and rescue, regardless of the transient anomalies of the day. Thus, combat search and rescue advocates should not be surprised when military leaders eventually favor the acquisition of offensive weapons, which are in line with theory and doctrine, over combat search and rescue assets.

Therefore, to satisfy both the leaders interested in saving downed crewmembers, as well as the warriors interested in killing their enemies, a multifaceted force capable of conducting offensive operations, as well as combat search and rescue is the answer. This force, in accordance with war theory, could be exploited as a powerful airpower asset, capable of “destroying, neutralizing, suppressing, defeating, interdicting, and striking enemy centers of gravity.”¹⁸⁰ Moreover, Joint Force Commanders could exploit the flexibility of

¹⁷⁸ Ibid., 34.

¹⁷⁹ Ibid., 60.

¹⁸⁰ Ibid., 60.

this force by directing it to conduct combat search and rescue missions during both traditional combat operations, as well as in smaller-scale contingencies.

Chapter 5

Smaller-Scale Contingencies

The dangers we face are unprecedented in their complexity. Ethnic conflict and outlaw states threaten regional stability; terrorism, drugs, organized crime and proliferation of weapons of mass destruction are global concerns that transcend national borders.

— William Jefferson Clinton
1998 US National Security Strategy

Introduction

The disintegration of the Soviet Union decreased the threat that limited conflicts around the globe could ignite a world war between superpowers. Unfortunately, the end of the Cold War also resulted in new and expensive security challenges. As noted earlier, rogue nations are now unrestrained by a coercive superpower, and tend to be more willing to use force within and across borders. This turmoil has resulted in “multilateral chaos” within the international community, complete with difficult and frequent challenges.¹⁸¹

Instead of mobilizing for global war, leaders will most likely task the US military to respond to a number of smaller-scale contingencies, ranging from disaster relief, through non-combatant evacuation operations, to perhaps even another regional war within the next decade. In fact, the 1998 US National Security Strategy states that smaller-scale contingency operations will encompass the full range of military operations, short of theater warfare, and that these operations will likely pose the most frequent challenge for US forces.¹⁸² Indeed, much of the academic literature supports this assertion, such as Harvard Professor Samuel Huntington’s assertion that future conflict will be caused by the cultural clash of civilizations, and not by traditional ideology or economics.¹⁸³

US Air Force Brigadier General Norton Schwartz similarly believes that smaller-scale contingencies will be the most frequent form of conflict, and advocates that the role of airpower in these contingencies should be to

¹⁸¹ Richard N. Haass, “Foreign Policy by Posse”, *Strategy and Force Planning*, 283.

¹⁸² The White House, *A National Security Strategy for a New Century*, (Office of the President of the United States, October 1998), 20-21.

¹⁸³ Samuel P. Huntington, “The clash of civilizations?” *Foreign Affairs*, Summer 1993. 22.

“respond, shape, control, and determine outcomes.”¹⁸⁴ Noting that the US must be able to fight and win major wars, as well as succeed in smaller-scale contingencies, General Schwartz recently stated, “As a result, we need to develop and retain a multi-dimensional force that has sufficient flexibility to swing both ways.”¹⁸⁵

Some of these missions will be best suited for airpower, while some will require soldiers to be on the ground, directly interacting with the civilians and foreign military forces involved in the crisis.¹⁸⁶ In addition, some of these smaller-scale contingencies might be rather benign, while others could be very serious. Joint Force Commanders will confront these smaller-scale contingencies with a synergistic combination of airpower, naval, and ground assets, based on what these forces can contribute in resolving the crisis.

If these smaller-scale contingencies remain benign and manageable, the current anomaly characterized by casualty aversion, force protection, and combat search and rescue will most likely continue. History suggests, however, that if decision makers are seriously challenged by these smaller-scale contingencies, either because of credible threats or limited budgets, their recent interest in bolstering conventional combat search and rescue within the US Air Force may wither.

In such circumstances, the leadership will soon ascertain that unless combat search and rescue forces can radically change their modus operandi, or expand their capabilities into the offensive or unconventional arenas, they will not be able to respond, shape, control, or determine outcomes. Moreover, US leaders will also eventually learn that sprawling urban areas, a characteristic associated with many future smaller-scale contingencies, are not harmonious with a Vietnam-era combat search and rescue model.

Recent historical examples provide the foundation for this prediction, as well as the support for a recommendation. By using a number of smaller-scale contingencies from the past, as a blueprint for the future, one can analyze the

¹⁸⁴ Brigadier General Norton Schwartz, Director of Strategic Planning, Deputy Chief of Staff, Plans and Programs, “Aerospace Power in Smaller-Scale Contingencies” Briefing, The US as a 21st Century Aerospace Power conference, Royal Sonesta Hotel, Cambridge, Massachusetts, 18 November, 1998.

¹⁸⁵ Ibid.

¹⁸⁶ US Air Force Major John W. Blumentritt, “Will Airpower, Specifically Helicopters, Replace Tanks in 2010?” *Armor Magazine*, September-October 1998, 9.

limited contributions conventional combat search and rescue forces can provide Joint Force Commanders faced with these contingencies. In addition, while searching for solutions, one should envision how a multifaceted force could better support these leaders.

Natural Disaster Relief Operations

One of the most benign, smaller-scale contingencies within the spectrum of conflict involves natural disaster relief operations.¹⁸⁷ In recent years, the US Air Force has been directed to more fully participate in these operations, in an effort to shape positively the international environment.¹⁸⁸ For example, C-5 *Galaxy* transport aircraft responded to the Caribbean Islands following Hurricane *Georges* in September 1998, and other US Air Force Air Mobility Command assets delivered relief supplies to Guam three months later after Super-typhoon Paka.¹⁸⁹

US Air Force combat search and rescue forces have participated in disaster relief operations, such as providing assistance to Icelandic citizens following avalanches, or responding to domestic disasters such as hurricanes and ice storms. However, these responses have generally been conducted as ancillary tasks, driven by the desire to relieve human suffering and not under combat conditions. Participating aircraft and crews have therefore been unarmed, and not tasked to provide a combat search and rescue capability to other participating forces.¹⁹⁰

In contrast, US military forces have directed relief operations in volatile areas, to both relieve suffering and to serve as an instrument of national policy.¹⁹¹ Although most of these missions do not involve combat, US Air Force

¹⁸⁷ Henry C. Bartlett and others, "The Spectrum of Conflict: What can it do for planners", *Strategy and Force Planning*, (Newport: Naval War College Press, 1997), 404.

¹⁸⁸ Brigadier General Schwartz briefing.

¹⁸⁹ David Castellon, "Troops Pick Up the Pieces in Guam / In Typhoon's Wake, Military Delivers People, Equipment", *Air Force Times*, 12 January 1998, 4.

¹⁹⁰ US Air Force Major Westley C. Kasper, HH-60G *Pave Hawk* Helicopter Pilot and Flight Safety Officer, US Air Force Air Warfare Center, Nellis Air Force Base, Nevada, Telephone Interview with author, 12 December 1998.

¹⁹¹ Brigadier General Schwartz briefing.

basic doctrine warns that violence and casualties may still occur.¹⁹² In fact, rogue or subversive groups in disaster stricken areas often exploit opportunities to exact political advantages in time of crisis, and could possibly target US military aircraft, regardless of the humanitarian nature of their mission.¹⁹³

An example of a potentially dangerous natural disaster relief operation involved the US response to Honduras and Nicaragua following Hurricane Mitch in 1998. Despite the fact that the US Air Force Office of Special Investigations considers this area to be threatening to Americans,¹⁹⁴ US Air Force flights carrying disaster relief supplies to Central America began immediately after the disaster.¹⁹⁵ In addition, a Joint Task Force comprised of 500 people, 20 helicopters, 4 fixed-wing airplanes, and 10 zodiac boats quickly responded.¹⁹⁶ US special operations forces delivered 22,000 pounds of relief supplies throughout the area, while a large number of US Air Force civil engineering forces repaired infrastructure, many times in remote and austere areas.¹⁹⁷ In fact, for two straight months, vulnerable US Air Force C-27 *Spartans* flew over 200 sorties, carried 330 passengers, and delivered more than 690,500 pounds of relief supplies to remote areas that were most affected by the hurricane.¹⁹⁸

Despite potential threats, however, there is no historical precedence for deploying conventional US Air Force combat search and rescue forces to support these operations. In fact, due to airlift limitations and the number of conventional combat search and rescue forces within the US Air Force, this would not be practical. If an aircraft were downed in these operations, it is

¹⁹² US Air Force, *Air Force Basic Doctrine*, Air Force Doctrine Document 1 (Washington: September 1997), 9.

¹⁹³ US Air Force Lieutenant Colonel Wray Johnson, Professor, School of Advanced Airpower Studies. Memorandum to author, Maxwell Air Force Base, Alabama, 7 May 1999.

¹⁹⁴ Special Agent, US Air Force Office of Special Investigations, Detachment 405, Maxwell Air Force Base, Alabama. Telephone interview with author, 16 March 1999.

¹⁹⁵ David Castellon, "Units Aiding in Central America Heading Home / Engineers Face Return Missions For '99 Training" *Air Force Times* 15 February 1999, 11.

¹⁹⁶ Brigadier General Schwartz briefing.

¹⁹⁷ Castellon, 11.

¹⁹⁸ US Army Specialist Jeremy Ausburn, 49th Public Affairs Detachment (Airborne), *Air Force News Service*, "C-27 Spartan key to hurricane relief efforts" 1 December 1998, <http://www.af.mil/news/Dec1998/n19981201_981851.html>, (30 March 1999).

likely that US leaders on scene would direct any military force available to recover the distressed crew.

Figure 15
Airpower assets at Soto Cano Air Base, Honduras. US Air Force basic doctrine warns that violence and casualties might occur during these missions, but these airmen are not afforded traditional combat search and rescue coverage. Photo courtesy US Air Force.

Since history suggests that special operations forces tend to be immediately involved in operations like this, it seems logical to assume they would be the force of choice to execute an unexpected combat search and rescue mission. Logic also holds true that if these forces were properly trained, organized, and equipped, they could provide airmen conducting relief missions the combat search and rescue coverage they require, while concurrently employing their airpower assets in a relief capacity.

Non-Combatant Evacuation Operations

Moving up from natural disaster relief operations, along the spectrum of conflict, are non-combatant evacuation operations.¹⁹⁹ Leaders have directed US Air Force aircraft to participate in these evacuations, according to General Schwartz, “to control and determine outcomes.”²⁰⁰ For example, US military assets helped evacuate 2100 non-combatants from Liberia in 1996.²⁰¹ In 1997, US leaders again tasked military forces to help move 1000 people out of Albania.²⁰² These operations involved many aircraft, hundreds of sorties, and a number of special operations forces.

¹⁹⁹ Bartlett and others, 404.

²⁰⁰ Brigadier General Schwartz briefing.

²⁰¹ Julie Bird, “To The Rescue”, *Air Force Times*, 29 April 1996, 18.

²⁰² Brigadier General Schwartz briefing.

US Air Force combat search and rescue forces have participated in non-combatant evacuation operations in the past, with one of the most famous being the 1975 evacuation of Saigon. In addition, US Air Force combat search and rescue forces participated in a 1994 non-combatant evacuation exercise in Iceland, where the nation simulated a massive volcanic eruption. However, examples of conventional combat search and rescue forces conducting these missions under fire are dated, and the exercise in Iceland, albeit challenging, was actually a large peacetime helicopter airlift mission.

In contrast to missions conducted in benign environments, US officials have tasked military forces to conduct non-combatant evacuation operations under combat conditions. In fact, US airmen accomplished both the Liberian and Albanian non-combatant evacuation operations under fire. Roving gangs shot at incoming airplanes and helicopters in Albania, and US Air Force F-16 *Falcons* at one point intercepted Albanian MiG fighters.²⁰³ US airmen were certainly operating in harm's way in both these operations, and likely desired a combat search and rescue capability.

However in both these operations, special operations forces, not conventional combat search and rescue assets were represented. In fact, as for the non-combatant evacuation operation in Liberia, five Air Force Special Operations Command MH-53J *Pave Low* helicopters, transported by three C-5 *Galaxy* transport aircraft, were in place within six hours of notification.²⁰⁴

Figure 16

US Embassy, Tirana Albania. 1000 people were evacuated, F-16 *Falcons* flew hundreds of sorties, and MH-53J *Pave Low* helicopters provided combat search and rescue coverage. Photo courtesy Brigadier General Schwartz.

These helicopters subsequently flew 68 evacuation missions. As for Albania, MH-53J *Pave Low* helicopters provided combat search and rescue coverage for combat aircraft, flying hundreds of sorties.²⁰⁵

The evidence seems clear that special operations forces already located in a contested area, or immediately dispatched at the onset of the crisis, tend

²⁰³ Ibid.

²⁰⁴ Bird, 18.

to serve Joint Force Commanders as a key combat search and rescue asset. Therefore, it seems logical to properly prepare a multifaceted force, capable of conducting evacuations and executing special operations, as well as providing combat search and rescue. Authorities in charge of non-combatant evacuation operations could then employ these assets in a variety of ways, depending on the peculiarities of the crisis.

Urban Operations

Noted journalist Robert Kaplan, in his article “The Coming of Anarchy”, pessimistically reported that over the next 50 years, the Earth’s population will soar from 5.5 billion to more than 9 billion, resulting in environmental degradation and social disruption. In addition, 95 percent of this population increase will be in the poorest regions of the world. As a result, these masses will congregate in sprawling urban areas, highly susceptible to scarcity, crime, disease, disaster, and social conflicts.²⁰⁶

General Schwartz believes that the highest level of smaller-scale contingencies concerns operations in these urban areas, and predicts that airpower will be tasked to participate. He recently opined, “As we move up the spectrum of conflict, it is crucial to remember that aerospace power, as part of the joint team, has a sizable and often unique contribution to make in urban environments.”²⁰⁷

Although it is logical to assume that US Air Force operations will involve urban operations, it is important to note that these areas have historically challenged US Air Force conventional combat search and rescue forces. In fact, during the Linebacker II bombing campaign in December 1972, not one downed pilot or crewmember was picked up from North Vietnam’s heartland, because the targets were in densely populated and thus highly defended areas.²⁰⁸

Even today, conventional combat search and rescue forces still do not seriously train to recover downed crewmembers from urban areas. Captain Michael Geragosian, in his 1997 US Air Force Weapons School paper entitled

²⁰⁵ Brigadier General Schwartz briefing.

²⁰⁶ Robert D. Kaplan, “The Coming of Anarchy”, *The Atlantic Monthly*, February 1994, 58.

²⁰⁷ Ibid.

“Mission Planning for Rescue Operations in Urban Terrain (ROUT)”, wrote that experience in urban operations, within the conventional combat search and rescue community, is “sorely lacking, being primarily supplied by former special operations crewmembers that have been involved in the planning and execution of urban operations.”²⁰⁹ Captain Geragosian goes on to recommend that once tasked for urban operations, planners should obtain detailed imagery and accurate small maps of the potential recovery area, study video footage, and practice flying the mission in simulators and mission rehearsal facilities.²¹⁰

As Captain Geragosian notes, unless conventional combat search and rescue forces radically change their ways of doing things, their effectiveness in conducting traditional combat search and rescue in urban areas will be greatly constrained. In fact, both the historical record, as well as the advice provided by Captain Geragosian, suggests that the current *modus operandi* for combat search and rescue, where time is the primary measure of effectiveness, is not a survivable concept in urban operations. Moreover, as urban areas continue to proliferate, and the challenges associated with these areas mount, it is likely that conventional combat search and rescue operations will be constrained to only saving downed pilots and crewmembers who land in finite rural areas.

If this were carried to logical extremes, with no merging of forces or changes in *modus operandi*, the US Air Force would have a special operations force capable of conducting urban rescues, and a duplicate set of bucolically focused forces dedicated to conventional combat search and rescue. Conversely, if conventional combat search and rescue leaders adopt Captain Geragosian’s recommendation to unilaterally modify their *modus operandi* toward detailed planning, then the US Air Force would maintain two redundant and competing organizations.

It would be more logical for a multifaceted force, supported by dedicated extraction teams, unconventional assisted recovery mechanisms, and clandestine aircraft to serve as the force of choice to recover downed crewmembers from urban areas. Joint Force Commanders could then use any

²⁰⁸ Earl H. Tilford, *The United States Air Force Search and Rescue in Southeast Asia* (Washington D.C.: Center for Air Force History, 1980), 155.

²⁰⁹ Captain Michael Geragosian, “Mission Planning for Rescue Operations in Urban Terrain (ROUT),” (Unpublished Research Paper, US Air Force Weapons School, Nellis Air Force Base, NV: June 19997), 2.

part of this unconventional rescue and recovery mechanism, ranging from clandestine helicopter extractions, to partisan, mercenary, dissident, or even outlaw help to recover downed pilots from urban areas. In addition, if properly trained, organized, and equipped, this multifaceted force could save downed pilots from rural areas by conventional means. Finally, these multi-role forces could serve as powerful airpower assets and conduct special operations missions, to include countering the proliferation of weapons of mass destruction, an area explored in the next chapter.

²¹⁰ Ibid., 5.

Chapter 6

Weapons of Mass Destruction

The proliferation of these horrific weapons presents a grave and urgent risk to the United States and our citizens, allies, and troops abroad. Reducing this risk is an absolute priority of the United States.

— Proliferation: Threat and Response, April 1996

Introduction

Special circumstances, transient anomalies, and the political issues of the day have historically distracted US policy makers in regard to combat search and rescue. The dilemma is that while these leaders want the capability to rescue downed crewmembers, it is impossible to justify combat search and rescue as much more than a morale enhancing tool.²¹¹ In the end, it is normally a credible threat against US national security, coupled with fiscal constraints, which traditionally refocuses these leaders away from this altruistic mission, and back towards the desire for an offensive capability.

Unfortunately, evidence suggests that the renewed interest in bolstering combat search and rescue within the US Air Force may be thwarted by a very real threat to US national security--specifically, weapons of mass destruction. In fact, a number of rascalion nation-states and transnational organizations may seek to hurt the US using asymmetric means.²¹² Terrorists may use weapons of mass destruction, to include biological, chemical, and even rudimentary nuclear devices against US citizens and facilities. US national security decision makers will soon ascertain that conventional combat search and rescue forces are neither trained, organized, or equipped to repel these attacks, and will instead seek to acquire unique offensive weapons to mitigate this problem.

Moreover, history also insinuates that this threat may spoil preliminary plans to recreate a robust conventional combat search and rescue force. In

²¹¹ US Air Force Lieutenant Colonel Bob Hunt, "Combat Search and Rescue: A Future Special Operations Mission?" (Unpublished Research Paper, Air University, Maxwell Air Force Base, Alabama: April 1996), 21.

²¹² US Air Force Lieutenant Colonel Peter L. Hays and others, ed., *Countering the Proliferation and Use of Weapons of Mass Destruction* (New York: The McGraw-Hill Companies, Inc., 1998) 5.

their search for a specialized capability, leaders will eventually turn toward US Special Operations Command, an organization already trained, organized, and equipped to meet the challenges associated with these weapons.²¹³ Since cutting conventional combat search and rescue assets, in an effort to bolster special operations forces in a time of crisis has a historical precedent, it is very likely that US decision makers might once again repeat this pattern. Unfortunately, combat search and rescue capabilities will most likely again wither.

To appreciate this prediction, one must first study the challenges that weapons of mass destruction pose to US leaders, then critically evaluate the limited contributions a conventional combat search and rescue force can provide. In searching for solutions, one should also imagine how a multifaceted force, capable of providing offensive options, as well as a combat search and rescue capability, could better advance US national security interests.

The Threat

Joint publication 1-02, *Department of Defense Dictionary of Military Terms*, defines weapons of mass destruction as, “Weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. [They] can be nuclear, chemical, biological, and radiological weapons.”²¹⁴ A 1993 Office of Technology study helps one comprehend the “high order of destruction” associated with these weapons. For example, an effectively placed Hiroshima-type 12.5 kiloton nuclear weapon could result in 23,000 to 80,000 deaths.²¹⁵ As for a biological weapon of mass destruction, one hundred kilograms of anthrax spores could kill 420,000 to 1,400,000 people, depending on the type and efficiency of the delivery method.²¹⁶

Attacks using weapons of mass destruction are not simply theoretical, but have recently occurred. For example, the Japanese Doomsday cult Aum

²¹³ Glen Goodman, “Deep Underground Tunnels,” *Armed Forces Journal International*, vol. 134, no 11, Jun 1997, 61.

²¹⁴ Joint Chiefs of Staff, DOD Dictionary of Military and Associated Terms (Joint Pub 1-02) (Washington, DC.: 23 March 1994, as amended through 12 January 1998), 488.

²¹⁵ Office of Technology Assessment, *Proliferation of Weapons of Mass Destruction* (Washington, D.C.: Government Printing Office, Aug 1993), 50.

²¹⁶ Ibid.

Shinrikyo released deadly sarin nerve gas into the Tokyo subway system at the height of morning rush hour in 1995, killing twelve and hospitalizing five thousand.²¹⁷ In addition, the salmonella bacteria produced and disseminated by two members of the Rajneesh religious sect in Oregon, who were trying to affect the outcome of a 1984 local election, caused over 700 non-fatal casualties.²¹⁸ Neither of these attacks resulted in the devastation that weapons of mass destruction are capable of, however they do serve as an unmistakable warning.

The desire to counter the proliferation and use of weapons of mass destruction, referred to as counterproliferation throughout the literature, is gaining wide appeal.²¹⁹ For example, US Army General Henry H. Shelton, the Chairman of the Joint Chiefs of Staff, recently wrote that one of the most serious challenges facing the US is the potential for weapons of mass destruction to fall into the hands of aggressors, terrorists, criminals, or pariah states with the will and means to use them.²²⁰ In addition, scholars and military officers are publishing numerous thought pieces which tend to echo General Shelton's concerns. Illustrating a common theme throughout the literature, Stephen C. Pelletiere writes: "Countering terrorism and the proliferation of weapons of mass destruction should be the top priority of post-Cold War US intelligence efforts."²²¹

The Response

As these threats become more menacing, US national security decision makers will most likely employ a variety of tools in an attempt to counter them. Although US leaders may first seek to resolve weapons of mass destruction problems in the US using law enforcement agencies, and in the international arena peacefully through diplomatic channels or economic sanctions, they may

²¹⁷ John F. Sopko, "The Cooperative Threat Reduction Program in Transition: From Nukes to Gas, Bugs, and Thugs", Peter L Hayes and others, ed., *Countering the Proliferation and Use of Weapons of Mass Destruction*, (New York: The McGraw-Hill Company, 1998), 40.

²¹⁸ Ibid., 50.

²¹⁹ Hays and others, vii. The term "counterproliferation" was first coined by Les Aspin in December 1993, when he announced the Counterproliferation Initiative.

²²⁰ US Army General Henry H. Shelton, "Special Operations Forces: Looking Ahead", *Defense* 97, issue 3, 1997, 35.

²²¹ Stephen C. Pelletiere, "Terrorism: National Security Policy and the Home Front", (Strategic Studies Institute, U.S. Army War College, Carlisle Barracks, Pennsylvania, 15 May 1995), 89.

eventually require the service of the US military. One tool US Air Force leaders can bring into the equation is airpower.

US policy makers may employ airpower in a number of ways to counter weapons of mass destruction. For example, leaders may direct airpower to destroy production and storage facilities located deep within problem nation-states. US leaders could also task airpower to defend against attacking enemy aircraft armed with these weapons. Finally, US leaders could employ airpower in assisting domestic law enforcement agencies in thwarting the manufacture and dissemination of weapons of mass destruction within the US.

During many of these missions, airmen would be operating in harm's way, warranting combat search and rescue coverage. In addition, many of these missions could be accomplished using nontraditional forms of airpower, such as special operations forces. To provide airmen the combat search and rescue coverage they desire, and to provide US national security decision makers with a flexible counterproliferation capability, a multifaceted force capable of conducting counterproliferation operations, as well as combat search and rescue could be created and employed.

Intrusion Into Hostile Nation-States

US airpower can intrude into hostile nation-states, practically anywhere on Earth, and preemptively destroy facilities associated with weapons of mass destruction.²²² In fact, using airpower to strike foreign facilities suspected of producing such weapons has certainly been done in the past. For example, Israel used F-16 *Falcons* and F-15 *Eagles* to destroy the *Osirak* nuclear facility near Baghdad on 7 June 1981, charging that Iraq was developing nuclear weapons for use against them.²²³ In addition, US and British forces used airpower to attack suspected Iraqi weapons of mass destruction facilities in December 1998.²²⁴ During these missions, airmen would have ostensibly

²²² John A. Tirpak, ed., "The Long Reach of On-Call Airpower", *Air Force Magazine*, December 1998, 23-24.

²²³ "The IAF [Israeli Air Force] in the 21st Century", no date, <http://www.idf.il/ENGLISH/UNITS/IAF/present.htm>, (16 March, 1999).

²²⁴ William Matthews, "Bombs Over Iraq / Strike Includes First-Ever B-1B Attack" *Air Force Times*, 28 December 1998, 3.

desired a prompt combat search and rescue response had they been shot down.

However there is no evidence, at least in unclassified sources, suggesting that Israel had combat search and rescue forces ready to respond had any of their attacking aircraft been shot down deep in Iraq. The vast distances Israeli jets had to secretly travel, coupled with the political unfeasibility of pre-positioning conventional combat search and rescue forces within adjoining Arab territory, suggests they did not.²²⁵ Fortunately for the Israeli pilots, Iraqi defenses were caught by surprise and opened fire too late, resulting in no Israeli casualties.²²⁶ As for the December 1998 strikes, US conventional combat search and rescue assets maintained a vigilant alert posture, however no US or British aircraft were downed, and thus there was no requirement for a combat search and rescue response.

Reflecting on these attacks, one must consider the actual feasibility and utility of providing conventional combat search and rescue coverage to airmen conducting missions of this type. For example, not bringing rescue forces into a threat area, due to logistical, political, or security reasons does not seem efficient, however, these were certainly constraints that challenged the Israeli leadership. As for the combined US and British strikes, it was the permanent US “footprint” in the Middle East which allowed combat search and rescue forces to assume such a vigilant posture. Conventional combat search and rescue forces had remained tethered to their Southwest Asian alert positions for almost six years prior to this attack.

Unfortunately, the Israeli model may be more realistic than the December 1998 model, in regard to long range strikes and combat search and rescue. In fact, a recent article in *Air Force Magazine* suggests that the US Air Force is planning to routinely employ airpower in ways that are not conducive to conventional combat search and rescue concepts. In his article “The Long Reach of On-Call Airpower”, John Tirpak writes: “Swiftly delivering fire and iron on distant targets constitutes a signature capability of the Air Force. B-1B, B-

²²⁵ James Corum, Professor, School of Advanced Airpower Studies. Interview with author, 6 April 1999, Air University Library, Maxwell Air Force Base, Alabama.

²²⁶ “The IAF [Israeli Air Force] in the 21st Century”

2A, and B-52 bombers, from a cold start at their home base in the continental United States, could attack virtually anywhere on Earth in 18 hours."²²⁷

It is highly unlikely conventional combat search and rescue forces, operating under their current *modus operandi*, could be pre-positioned to provide rescue coverage to these crews, attacking distant targets virtually overnight. Since these facilities may be located anywhere in the world, and most likely deep within the hostile nation-states, crews conducting long-range attacks against facilities associated with weapons of mass destruction probably cannot expect a conventional combat search and rescue presence.

In contrast, a multifaceted force could have provided both Israeli and US leaders greater flexibility and more options in preparing and executing these attacks. For example, according to *Armed Forces Journal*, US special operations forces can slip undetected into rogue countries to gain evidence of secret weapons of mass destruction development programs, sabotage such a program, and detect, disarm, disable, and seize nuclear, chemical, and biological weapons.²²⁸ In addition, author Samuel M. Katz writes that Israel can also conduct preemptive strikes across its borders, using its *Yechidat Shaldag* special operations unit, a secretive Israeli Air Force special operations aviation force.²²⁹ Since these special operations forces may already be attacking targets deep in hostile areas, it would be logical to assume that they could also provide combat search and rescue to conventional aircraft, during parallel attacks.

²²⁷ Tirpak, 22.

²²⁸ Goodman, 61.

²²⁹ Samuel M Katz, "Desert lightning: Israel fields broad array of special forces." *Armed Forces Journal International* vol. 131 no 12, Jul 1994, 45-46.



Figure 17
Unconventional airpower assets. Special operations forces can conduct strikes against weapons of mass destruction facilities, deep within enemy territory. In addition, during parallel attacks with conventional assets, they could also provide combat search and rescue.

Defending Against Enemy Airpower

Considering the devastation that even one enemy aircraft could cause, if allowed to deliver a weapon of mass destruction, it would be logical to suggest that the first step in any military operation should be an unfettered attempt to achieve air superiority. Even before considering weapons of mass destruction, this assertion is heavily supported throughout airpower theory and doctrine. In fact, US national security decision makers and airpower strategists have expended vast resources in the past on both defensive and offensive counterair operations, in an effort to seek this condition. The lethal nature of weapons of mass destruction makes the concept of air superiority even more important.

One way to achieve air superiority is through defensive counterair operations. US Air Force fighter aircraft, in various locations around the world, maintain a vigilant defensive alert posture in preparation for aerial attack. For example, an attack against Iceland would be immediately met by US fighter aircraft based at Keflavik Naval Air Station, while an attack against South Korea would be repelled by fighters from both Osan and Kunsan Air Bases. In addition, the US Air Force currently maintains several continental air defense units, which still provide an attentive alert posture at various locations around the country.²³⁰ These worldwide forces, supported by US Air Force conventional

²³⁰ Carmen Nobel, "Air-Defense Role Would Be Reduced / But Guard Units Might Get New Planes" *Air Force Times*, 2 June 1997, 16.

combat search and rescue assets, routinely train to defend friendly areas against air attacks, as well as practice surviving and functioning in contaminated environments if defense fails.

Another way strategists employ airpower to gain air superiority, however, is through offensive counterair operations. Airpower theorist Giulio Douhet used a colorful analogy when he described this concept in 1921, asserting that it is more effective to “destroy the eggs in the nest, rather than try and shoot down all the birds.”²³¹ In line with this theory, US Air Force fighters, bombers, and special operators train extensively to attack enemy airpower assets, sometimes deep behind enemy lines, in an effort to prevent hostile aircraft from even taking off.

Gulf War strategists Colonel John Warden strongly believes one should attain air superiority as quickly as possible, using whatever means are available. In his book *The Air Campaign*, he does not focus specifically on weapons of mass destruction, but he firmly advocates that “air superiority is the first and most compelling task.”²³² In addition, he tends to favor offensive counterair over defensive counterair, stating, “aircraft awaiting enemy attack are not accomplishing anything else--they are putting no pressure on the enemy.”²³³ Finally, he advocates that airmen should seek air superiority through both traditional and nontraditional mechanisms, and illustrates this unconventional offensive counterair concept with a story about how the British launched a commando raid against an isolated German bomber unit during World War II.²³⁴

Once one considers the benefits of proactively destroying enemy aircraft on the ground using all means available, one can then imagine a number of ways that any offensive airpower asset, be it fighter, bomber, helicopter, or special operations team, could contribute to this mission. When adding weapons of mass destruction to the airpower equation, one should incorporate a sense of urgency in their thinking.

²³¹ Giulio Douhet, *The Command of the Air*, USAF Warrior Studies, eds. Richard H. Kohn and Joseph P. Harahan (new imprint, Washington D. C.: Office of Air Force History, 1983) 34.

²³² US Air Force Colonel John Warden, *The Air Campaign, Planning for Combat* (Washington, D.C.: National Defense University Press, 1988), 14.

²³³ *Ibid.*, 22.

²³⁴ *Ibid.*, 15.

In contrast to these ideas, however, US Air Force conventional combat search and rescue assets do not directly contribute to the achievement of air superiority. In fact, according to Air Force Doctrine Document 2-1.6, *Combat Search and Rescue*, “**The primary mission of Air Force CSAR [combat search and rescue] is to recover downed crewmembers and other isolated personnel.** [emphasis in original].”²³⁵ In fact, as other airpower assets battle for air superiority, these forces would most likely remain in their vigilant rescue alert posture, until prompted to respond to a shoot-down--and then, according to the 1997 Veda study, only under benign conditions.²³⁶

Reflecting on doctrinal and theoretical guidance, coupled with the ideas of Colonel Warden and the Veda study, one could argue that US Air Force conventional combat search and rescue forces are a diversion of airpower, and should instead be participating in the offensive quest for air superiority. In fact, every sortie not flown by a powerful combat search and rescue airpower asset, while anchored in an alert posture, or flown to save a lone airman before air superiority is achieved, is an offensive counterair sortie lost. Theoretically, for every offensive counterair sortie lost, the potential for an enemy aircraft delivering a weapon of mass destruction increases. Thus, with the lethality associated with weapons of mass destruction, one could argue that the morale enhancing benefits associated with maintaining a dedicated combat search and rescue force, are less than the risks associated with diverting airpower assets away from offensive counterair operations, at least until the enemy air threat has been reduced to an acceptable level.

A multifaceted force could recover downed pilots and crewmembers when appropriate, but still be able to cripple enemy aircraft on the ground in a number of unconventional ways. For example, a multifaceted force could eliminate enemy pilots and maintainers in garrison, and could conduct special reconnaissance missions in support of both conventional and unconventional

²³⁵ Department of the US Air Force, *Combat Search and Rescue Operations* (Air Force Doctrine Document 2-1.6) (Washington D.C.: 30 September 1998), 3.

²³⁶ Veda Incorporated, “Combat Search and Rescue Report to the Joint Chiefs of Staff and the Executive Agent for Combat Search and Rescue”, *Combat Search and Rescue Requirements and Capabilities Study*, (Washington D.C.: 10 February 1997) 3.

offensive operations. In addition, these airpower assets could position teams near important targets, who in turn could sabotage or wreck aircraft.

Figure 18

Highly trained teams--the "precision weapons" of special operations. Special operations forces, inserted deep in enemy territory, can conduct unconventional offensive counterair missions, in an effort to gain air superiority. Photo courtesy Defense Link.

History shows that destroying aircraft on the ground using unconventional forces has been validated in the past. For example, during the Vietnam War, 393 US and Allied aircraft were destroyed and another 1,185 damaged by small ground units firing mortars and rockets or guerilla forces using satchel charges.²³⁷ In 1981, a terrorist group infiltrated a US Air National Guard installation in Puerto Rico and affixed satchel charges to 11 fighter aircraft, destroying eight and damaging two.²³⁸ Finally, in 1968 an Israeli *Sayeret Mat'kal* force, described as a "super elite force to be dispatched deep behind enemy lines", destroyed 13 heavily guarded Middle East Airlines aircraft at Beirut International Airport.²³⁹

Demonstrating that a multifaceted force can also embrace the saving of downed pilots and crewmembers, Samuel Katz writes about Israeli commandos:

The most important message...for the average Israeli soldier in the field [is] if he or she should be captured, the Israeli government would do its utmost to secure the soldier's release. This pledge of support is an unwritten contract between government and servicemen and, when the skills and daring of Israeli commandos back up that pledge, it becomes a sacrosanct pact.²⁴⁰

²³⁷ David Shlapak and Alan Vick, "Check Six Begins on the Ground: Responding to the Growing Ground Threat to US Air Force Bases", (Santa Monica: Rand Corporation, 1995), 30.

²³⁸ Ibid.

²³⁹ Katz, 46.

²⁴⁰ Ibid.

Like the Israeli commandos, members of Air Force Special Operations Command could adopt this same pact with their fellow combat aviators, yet at the same time still retain the ability to employ their powerful airpower assets in an offensive manner.

Domestic Production and Dissemination

As for countering the domestic production and dissemination of weapons of mass destruction, conventional airpower cannot currently provide robust solutions. For example, US Air Force conventional aircraft could not have prevented the Rajneesh biological attack on the residents in Oregon, just as conventional aircraft assigned to the Japanese Air Self Defense Force could not have thwarted the Aum Shinrikyo attack in Tokyo. In these examples, domestic law enforcement would have been more effective than military airpower.

In fact, the US Congress recently recognized a deficiency in this area, and passed the Nunn-Lugar-Domenici II amendment to the 1997 Defense Authorization Act, marking a new, tentative step in domestic security.²⁴¹ In addition to other measures, lawmakers designed this act to bolster federal, state, and local officials, as well as the US Customs Service, in their efforts to interdict the domestic movement of weapons of mass destruction.²⁴²

However, it is questionable if law enforcement agencies throughout the US are adequately prepared to deal with the domestic production and dissemination of weapons of mass destruction. In fact, a number of calls to city, county, state, and federal law enforcement agencies yielded less than encouraging results. Albeit a somewhat unscientific survey, 10 calls placed to law enforcement agencies throughout Alabama, Texas, and Washington D.C., asking officials what they would do in case of a reported biological or chemical threat, yielded a number of discouraging responses. No local or state agency contacted could provide an answer. As for the Federal Bureau of Investigation, a local office in Montgomery, Alabama, reported that there is little weapons of mass destruction expertise at the local level, and a call to their headquarters in Washington D.C. validated these limitations. Finally, a senior official assigned to a US Customs Service aviation branch said, "These questions about weapons

²⁴¹ Sopko, 54.

²⁴² Ibid.

of mass destruction are off the wall. In fact, I've never thought about these issues before, and I'm wondering if we should be doing something about it."²⁴³

The purpose of this line of thought is not to discredit domestic law enforcement, create hyperbole, or advocate that the US military should enforce domestic laws. Instead, this discussion simply illustrates that domestic law enforcement counterproliferation efforts are still maturing, and the threat may dictate a requirement for US military expertise. If combat search and rescue assets assigned to the US Air Force were trained, organized, and equipped for counterproliferation operations, similar to their Air Force Special Operations Command counterparts, US policy makers could offer local, state, and federal law enforcement agencies unique capabilities in finding and halting the domestic production of weapons of mass destruction. This multifaceted force, located throughout the US, could serve a critical transitory role in this endeavor, at least until domestic law enforcement warms to the task.

There are, however, several liabilities associated with creating a robust US Air Force organization capable of counterproliferation and combating terrorism within the domestic US. For example, General Shelton warns that "as the threat moves farther inland, the distinction between US law enforcement agencies and military forces may blur, which will subsequently 'inspire' much political, legal, and public debate."²⁴⁴ In addition, using US military forces to enforce domestic law is restricted under a number of laws, to include the Congressional Posse-Comitatus Act of 1878.²⁴⁵ Finally, using military forces in a domestic counterproliferation role, even within the law, could further inflame popular conspiracy theorists, who charge that "black helicopters are moving war material and troops, planning a war against the American people, and creating detention centers around the country."²⁴⁶

Regardless of these challenges, US military leaders must still offer their political leadership a wide range of options to counter the threat of weapons of

²⁴³ Steven Keim, Operations Officer, US Customs Service, San Angelo Texas Aviation Branch. Telephone interview with author, 15 March 1999.

²⁴⁴ US Army General Shelton, "Special Operations Forces: Looking Ahead", 3.

²⁴⁵ US Air Force Technical Sergeant Randy Pool, Non Commissioned Officer in Charge, Civil Law, 42nd Air Base Wing, Maxwell Air Force Base, Alabama. Telephone interview with author, 18 March 1999.

²⁴⁶ Jim Keith, *Black Helicopters Over America: Strike-force for the New World Order* (Georgia: Illuminet Press, January 1995), 1.

mass destruction. A multifaceted force capable of conducting offensive counterproliferation operations, as well as combat search and rescue provides them a number of options, both domestically and abroad, while a conventional combat search and rescue force does not.

Chapter 7

The Solution--A Combined Team

To prepare for the future, special operations forces need to adapt to the changing nature of warfare by challenging conventional thinking and examining new options and operational concepts for the conduct of special operations in traditional and nontraditional environments. They need to consider possible changes in doctrine, roles, missions, and force structure and to examine new options and operational concepts.

— General Henry H. Shelton
Chairman, Joint Chiefs of Staff

Introduction

Having established that US national security decision makers would be more satisfied with, and thus more likely to permanently support a multifaceted force capable of conducting offensive operations, as well as combat search and rescue, one can then cogitate on how best to design this force. Although there may be a number of alternatives, one proposal would be to transfer all US Air Force search and rescue assets into Air Force Special Operations Command, then dual-employ them for both special operations and combat search and rescue. In conjunction with this alternative, current special operations crewmembers would also be formally inculcated in conventional combat search and rescue concepts. In the end, Air Force Special Operations Command would provide the preponderance of combat search and rescue forces for the US Air Force, as well as retain a powerful offensive airpower capability.

In creating this multifaceted force, both conventional combat search and rescue and special operations forces would have to merge their principle and collateral missions, modify their current modus operandi, undergo a force structure change, and accomplish necessary retraining and indoctrination. Although this proposal may seem daunting at first blush, necessary assets and infrastructure already exists to facilitate this merger.

Principal and Collateral Missions

According to Air Force Doctrine Document 2-1.6, *Combat Search and Rescue*, the primary mission of US Air Force conventional combat search and rescue forces is to recover downed crewmembers and other isolated personnel.²⁴⁷ In addition, their collateral missions include civil search and rescue, emergency aeromedical evacuation, disaster relief, international aid, noncombatant evacuation operations, counterdrug activities, and space shuttle support.²⁴⁸

Joint Publication 3-05, *Doctrine for Joint Special Operations*, lists nine principal missions special operations forces are responsible for, of which US Air Force resources assigned to Air Force Special Operations Command support.²⁴⁹ These include counterproliferation of weapons of mass destruction, combating terrorism, foreign internal defense, special reconnaissance, direct action, psychological operations, civil affairs, unconventional warfare, and information operations.²⁵⁰ In addition, special operations forces support eight collateral activities, which include coalition support, counterdrug missions, humanitarian demining, humanitarian assistance, peace operations, security assistance, special activities, and combat search and rescue.²⁵¹

In evaluating the two mission lists, one can see redundancy in not only the area of combat search and rescue, but also within a number of other missions. For example, both organizations are tasked to provide a counterdrug capability, conduct peacetime search and rescue missions, provide disaster relief, contribute to international aid, and evacuate noncombatants. Beyond this redundancy, however, special operations forces also conduct counterproliferation missions, combat terrorism, and provide Joint Force Commanders with a number of offensive capabilities. In the end, it becomes apparent that most missions conventional combat search and rescue forces

²⁴⁷ Department of the US Air Force, *Combat Search and Rescue Operations* (Air Force Doctrine Document 2-1.6) (Washington D.C.: 30 September 1998), 3.

²⁴⁸ Ibid.

²⁴⁹ Joint Chiefs of Staff, *Doctrine for Joint Special Operations* (Joint Pub 3-05) (Washington, D.C.: 17 April 1998) II-2.

²⁵⁰ Office of the Assistant Secretary of Defense (Special Operations/Low-Intensity Conflict), *United States Special Operations Forces Posture Statement*, 1998, (Washington D.C.: The Pentagon, 1998) 3.

²⁵¹ Ibid., 4.

perform are duplicated by Air Force Special Operations Command, while many warfighting missions embraced by Air Force Special Operations Command cannot be accomplished by conventional combat search and rescue forces.

To eliminate redundancy and bolster the capabilities of both special operations and combat search and rescue forces, US national leaders should transfer conventional combat search and rescue assets into Air Force Special Operations Command, where they could be trained, organized, and equipped to conduct the nine principal missions and eight collateral activities, in accordance with Joint Publication 3-05. In addition, Air Force Special Operations Command forces could be properly prepared to conduct conventional combat search and rescue missions, in accordance with Joint Publication 3-50.2.

To understand how Air Force Special Operations Command could serve US Special Operations Command, as well as assume the combat search and rescue mission for the conventional Air Force, one must first understand that Air Force Special Operations Command is a dual-use major command. As such, it serves as both the air component to US Special Operations Command, as well as a force provider to the US Air Force. Air Force Special Operations Command formally exercises this dual-use commitment in a number of ways, such as providing combat control teams and AC-130 Gunships to the conventional Air Force. In addition, and as noted earlier, Air Force Special Operations Command has in the recent past filled 70 percent of the worldwide combat search and rescue contingency taskings.²⁵² Unfortunately, due to training, organizational, and force structure limitations, these combat search and rescue commitments were filled at the “peril of special operations missions.”²⁵³

²⁵² US Air Force Colonel Jim Sills, representing Air Force Special Operations Command, delivered this information in a briefing to General Hugh Shelton, Commander in Chief, US Special Operations Command on 28 February 1997, then General Richard Hawley, Commander, Air Combat Command on 7 May 1997. <Sillsj@Hurlburt.af.mil>, “RE: Research Update”, Transmitted 5 February 1999. Personal e-mail received 5 February 1999.

²⁵³ US Army General Peter J. Schoomaker, Commander in Chief, US Special Operations Command, as quoted by Glenn W. Goodmam, Jr., “Global Scouts with a Ubiquitous Presence”, *Armed Forces Journal*, February 1999, 46.

Modus Operandi

Conventional combat search and rescue forces operate under a modus operandi, in which time is the primary measure of effectiveness. In contrast, special operations forces tend to be employed under a modus operandi more like their traditional, offensive airpower counterparts. Figure 19, taken from the 1997 Veda Study, depicts the differing nature of combat search and rescue and special operations.

Combat Search and Rescue	Special Operations
Rarely involved with the planned employment of ground forces	Usually involved with the planned employment of ground forces
Rarely joint in nature	Usually joint in nature
Reactive	Proactive
Result of other actions in the campaign plan	Planned targets or objectives are part of the campaign plan
Discovery by opposition does not usually end the mission	Discovery by opposing forces usually means plan is compromised and aborts the mission.
Most effective during daylight	Most effective at night
Personnel recovery is only mission	Personnel recovery is corollary activity to main mission objectives.
Not rehearsed	Premission activities include extensive rehearsal
Rely on general support	(Requires) specialized support, intel [intelligence], weather, logistics, etc.
Requires localized air superiority	Air superiority not required
Requires task force	Does not require task force

Figure 19

Contrasting Modus Operandi ²⁵⁴

It is these differences in modus operandi which tend to generate confusion between conventional combat search and rescue professionals and special operators. For example, Lieutenant Colonel Bob Hunt, a former MH-

²⁵⁴ Veda Incorporated, "Combat Search and Rescue Report to the Joint Chiefs of Staff and the Executive Agent for Combat Search and Rescue", *Combat Search and Rescue Requirements and Capabilities Study*, (Washington D.C.: 10 February 1997) 19.

53J *Pave Low* squadron commander and Gulf War veteran commented on these issues in his 1996 Air War College paper, entitled “Combat Search And Rescue: A Future Special Operations Mission?” He wrote, “When [special operations] crews think of rescue, visions of flying into a communication intensive, possible trap scenario inevitably leads them to prefer the security of night, communications-out operations.”²⁵⁵ He also wrote that the “search” aspect of combat search and rescue missions, especially in threat environments, is the same as “trolling” to draw enemy fire.²⁵⁶

Conventional combat search and rescue advocates sometimes assert that special operators are unable to effectively perform without detailed planning and rehearsals, a “luxury” incompatible with short-notice, combat search and rescue missions. In fact, retired US Air Force Lieutenant Colonel John Guilmartin, a former combat search and rescue pilot in Vietnam recently stated, “Special operators are stalkers and detailed planners. They are very good at meticulous planning. Rescue has to launch on incomplete information--a bar room fighter versus a calculated fighter.”²⁵⁷ In addition, Lieutenant Colonel Guilmartin opined, “It is easier to take a good combat search and rescue crew and make them special operators, but it would be hard to do it the other way around, because you have to get that mentality out.”²⁵⁸ Finally, there are various comments throughout the literature, as well as informally, which suggest special operators simply “do not like to do rescue.”²⁵⁹

Despite this apparent acrimony, there is no evidence which suggests that people assigned to Air Force Special Operations Command are inherently

²⁵⁵ US Air Force Lieutenant Colonel Bob Hunt, “Combat Search and Rescue: A Future Special Operations Mission?” (Unpublished Research Paper, Air University, Maxwell Air Force Base, Alabama: April 1996), 21.

²⁵⁶ *Ibid.*, 14.

²⁵⁷ US Air Force Lieutenant Colonel (Retired) John Guilmartin, Vietnam veteran, former combat search and rescue pilot, Ph.D., and currently associate professor of history, Ohio State University. “Combat Search and Rescue in Vietnam” Lecture, Air Command and Staff College, Maxwell Air Force Base, Alabama: 20 January 1999.

²⁵⁸ *Ibid.*

²⁵⁹ Hunt, 1. In addition to the modus operandi issues that Lieutenant Colonel Hunt points out, evidence suggests this attitude could also be a byproduct of the strong efforts made by US Army General James Lindsay, the first Commander in Chief of US Special Operations Command, to “purify” the organization of its non-special operations elements.

averse to saving lives. In fact, following a recent peacetime search and rescue mission by an MH-53J *Pave Low* crew in the Mediterranean, their squadron commander stated, "It's this kind of mission that gives our training a greater sense of purpose, and allows us to work together and help our fellow military members."²⁶⁰ Instead, As Lieutenant Colonel Hunt suggests, these crewmembers are simply not properly trained, organized, or equipped to provide combat search and rescue within conventional parameters, in which time is the primary measure of effectiveness.

In spite of these concerns, however, special operators must understand that time to respond will remain important in any method of operation involving combat search and rescue, despite their preference for detailed planning and rehearsals. In addition, technological limitations and unexpected malfunctions of survival radios may necessitate searches in hostile areas.

The solution to this apparent enigma is not to maintain two redundant forces with contrasting methodologies, but instead to create a multifaceted force, capable of both special operations as well as combat search and rescue. Once these forces are combined, professionals in each community could come together and develop a new *modus operandi*, complete with well-grounded tactics, techniques, and procedures. Guided by this refined *modus operandi*, this multifaceted force would retain its unique ability to conduct offensive operations, but still be responsive enough to conduct short notice combat search and rescue missions.

Force Structures

The US Air Force combat search and rescue fleet currently consists of approximately 30 HC-130N/P refueling airplanes and about 100 HH-60G *Pave Hawk* helicopters.²⁶¹ Approximately 60 percent of these assets are assigned to

²⁶⁰ US Air Force Lieutenant Colonel Paul Harmon, Commander, 21st Special Operations Squadron, as quoted by Staff Sergeant Ken Goss, 352d Special Operations Group Public Affairs, "21st SOS rescues seaman from ship in Mediterranean" 9 February 1999
<http://www.af.mil/news/Feb1999/n19990209_990208.html>, (30 March 1999).

²⁶¹ Bryan Bender, "USAF has eyes on new search and rescue fleet", *Jane's Defence Weekly*, 23 December 1998, 8.

US Air National Guard or US Air Force Reserve units.²⁶² In addition, and not counting a handful of US Air Force assets dedicated to flight testing, dignitary transport, and range support, the US Air Force has almost 30 UH-1N *Huey* helicopters tasked to provide security and logistic support at four intercontinental ballistic missile bases.²⁶³ These numbered helicopter flights are not considered combat search and rescue, but their crews maintain qualification in tactical low-level flying, night vision goggle operations, and formation procedures.²⁶⁴

Air Force Special Operations Command currently operates over 60 tanker aircraft, to include MC-130E *Combat Talons*, MC-130H *Combat Talon IIs*, and MC-130P *Combat Shadows*, most of which are capable of refueling the approximately 80 US Army and Air Force helicopters assigned to US Special Operations Command.²⁶⁵ In addition, most of these C-130 variants can also insert, remove, and supply special operations forces in hostile areas.²⁶⁶ As for helicopters, the one MH-60G *Pave Hawk* helicopter squadron assigned to Air Force Special Operations Command will be inactivated in fiscal year 1999 and transfer its assets to the conventional US Air Force combat search and rescue fleet. As for MH-53 helicopters, Air Force Special Operations Command owns 20 MH-53J and 14 MH-53M (enhanced MH-53J) helicopters.²⁶⁷ In fiscal year 2004, the first of 50 CV-22 *Ospreys* should attain an initial operational capability.²⁶⁸ By 2009, all Air Force Special Operations Command CV-22 *Ospreys* will be operational, and more than 80 special operations helicopters and C-130 aircraft will be retired from service.²⁶⁹

Finally, the 58th Special Operations Wing, under Air Education and Training Command, serves as the US Air Force school for initial helicopter pilot training, as well as the replacement training unit for almost all special

²⁶² Veda Incorporated, *Combat Search and Rescue Requirements and Capabilities Study*, 51.

²⁶³ US Air Force Major Terry Ulrich, US Space Command, <tulrich@spacecom.af.mil>, "RE: research", Transmitted 7 January 1999. Personal e-mail received 8 January 1999.

²⁶⁴ Ibid.

²⁶⁵ *United States Special Operations Forces Posture Statement*, 1998, 58-59.

²⁶⁶ Ibid., 56-57.

²⁶⁷ US Air Force Colonel Jim Sills, <SillsJ@Hurlburt.af.mil> "RE: MH-53J question", Transmitted 12 April 1999. Personal e-mail received 12 April 1999.

²⁶⁸ *United States Special Operations Forces Posture Statement*, 1998, 55.

operations and rescue crewmembers. This special operations wing currently employs four MC-130P *Combat Shadows*, three MC-130H *Talon IIs*, six UH-1N *Hueys*, seven MH-60G *Pave Hawks*, six MH-53J *Pave Lows*, and six TH-53A training helicopters. In addition, the wing oversees a small US Air Force training flight at Fort Rucker, Alabama, which provides UH-1N *Huey* training to initial helicopter pilot candidates.²⁷⁰

As for the future, US Air Force policy makers have recently assessed that conventional combat search and rescue aircraft are nearing the end of their useful life.²⁷¹ As noted earlier, this has prompted officials to begin assessing five broad alternatives, ranging from equipment solutions to procedural changes in the combat search and rescue mission.²⁷² The apparent intent is to once again ramp up conventional combat search and rescue forces.

An alternative force structure, made possible by transferring all these rotary-wing assets and HC-130 refueling aircraft into Air Force Special Operations Command would create a more flexible force. HH-60G combat search and rescue *Pave Hawks* could be modified into multi-role MH-60G special operations-rescue variants, perhaps even using combined Major Force Program funding. In addition, the same could probably be done for conventional HC-130 refueling tankers. As for the UH-1N *Huey* flights, they could support domestic counterproliferation missions and conduct peacetime search and rescue missions, while still supporting Air Force Space Command.

Finally, this robust force structure would ensure continuity in both special operations missions, as well as combat search and rescue during the transition to CV-22 *Ospreys*. In fact, the recent decision by the Joint Requirement Oversight Board would remain valid, and would simply require added Air Force Special Operations Command involvement. A future multi-role force structure could involve a number of CV-22 *Ospreys*, helicopters, and refueling tankers, or simply an added 65 CV-22 *Ospreys* to the current 50

²⁶⁹ Greg Alan Caires, "Advanced Aircraft Bolster Search, Rescue Capability", *National Defense*, February 1999, 28.

²⁷⁰ US Air Force Major Mark Moyer, MC-130P instructor pilot, 58th Special Operations Wing, <moyerm_at_mail4@sowgate.irk.aetc.af.mil>, "Re: Training questions", Transmitted 2 April 1999. Personal e-mail received 2 April 1999.

²⁷¹ Caires, 28.

²⁷² Bender, 8.

already programmed for Air Force Special Operations Command.²⁷³ Only a comprehensive analysis of alternatives, with professionals from both Air Force Special Operations Command and the combat search and rescue community, could determine what future force structure would best serve US national security interests.

Training and Indoctrination

In thinking about how to prepare this new force, one must first realize that the 58th Special Operations Wing already trains US Air Force conventional combat search and rescue crews, as well as almost all special operators. In fact, a pilot assigned to fly the special operations MH-60G *Pave Hawk* completes essentially the same flying training program as one destined for a conventional HH-60G *Pave Hawk* combat search and rescue unit. A current wing instructor remarked:

There is no fundamental difference in the [copilot or aircraft commander upgrade] course an AFSOC [Air Force Special Operations Command] pilot would receive here, versus an RQS [combat search and rescue]-bound pilot. All the basic academics, systems, simulators, and flying training follow the same syllabus.” That said, there are a couple of subtle additions that an AFSOC candidate would get.²⁷⁴

A similar situation exists at the US Air Force Weapons School. According to recent graduate Captain Mike Geragosian, “Only Rescue has a division at the Weapons School, so the syllabus is the same, regardless of your previous experience [combat search and rescue or special operations].²⁷⁵ In addition, Captain Geragosian asserts that the curriculum is complemented by the strong special operations background of former and current commanders, as well as instructors. Thus, he states, some of it includes a special operations

²⁷³ Ibid.,; Bryan Bender reports that the US Air Force estimates it will need 65 CV-22 *Ospreys* to replace all 107 HH-60G *Pave Hawks* and 33 HC-130 refueling airplanes.

²⁷⁴ US Air Force Major Matt Lyons, MH-60G *Pave Hawk* Helicopter Pilot and Flight Safety Officer, 58th Special Operations Wing, Kirtland Air Force Base, New Mexico, <lyonsm@58sowgate.irk.aetc.af.mil> “Re: training”, Transmitted 13 May 1999. Personal e-mail received 14 May 1999.

²⁷⁵ US Air Force Captain Michael Geragosian, HH-60G *Pave Hawk* pilot and graduate of the US Air Force Weapons School, Nellis Air Force Base, Nevada, <Geragosian.Michael@nellis.af.mil> “RE: weapons school”, Transmitted 10 May 1999. Personal e-mail received 10 May 1999.

“spin”, as well as valuable tactics, techniques, and procedures pertaining to military operations other than war.²⁷⁶

Finally, there are a number of training and indoctrination benefits associated with Air Force Special Operations Command absorbing the UH-1N *Huey* flights. Although the primary mission of these units is to provide support to Air Force Space Command, the Air Force Personnel Center regards these flights as first-assignment “farms”, designed to “grow” new crewmembers into the MH-53J *Pave Low* or MH/HH-60G *Pave Hawk*.²⁷⁷ In lauding this concept, a commander of one of these units recently wrote:

I have almost exclusively first assignment pilots with less than 500 hours, flying rescue missions involving night vision goggles in mountains up to 6000 feet. The quality of our new pilots is outstanding. These guys are smart, motivated, and dedicated, and go on to excel in both H-60s and H-53s.²⁷⁸

With this outstanding program already in place, US Air Force leaders could further provide these young airmen training in both special operations and combat search and rescue core competencies. In addition, these “farms” provide a unique opportunity to mitigate any long-term rivalry between special operators and combat search and rescue professionals, by “growing” a new generation of crewmembers who embrace both missions.

Counterarguments

Over four hundred years ago, Niccolo Machiavelli wrote:

There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order.²⁷⁹

Moving the combat search and rescue mission out of the conventional Air Force and into Air Force Special Operations Command would be no

²⁷⁶ Ibid.

²⁷⁷ US Air Force Major Doug Goodlin, Former Chief, Air Force Helicopter Assignments, “Spread the Word” briefing, Air Force Personnel Center, San Antonio, TX 18 March, 1998.

²⁷⁸ US Air Force Lieutenant Colonel (select) Robert F. Lindsay, Commander, 76th Helicopter Flight, Vandenberg Air Force Base, California, <LindsayR@vafb6.vafb.af.mil>, “RE: (no subject)”, Transmitted 7 July 1999. Personal e-mail received 7 July 1999.

²⁷⁹ Niccolo Machiavelli, *The Prince*, as quoted by Stephen Rosen, *Winning the Next War* (Ithaca and London, Cornell University Press, 1991) 1.

exception to Machiavelli's pessimistic prediction. In fact, despite the fact that it would be the fighter community who would clearly benefit most from this proposal, the literature suggests that they are the ones most skeptical. Their concerns may stem from a number of reasons, but negative experiences from the Gulf War most likely serve as the wellspring.

For example, evidence suggests that a number of people were not comfortable with combat search and rescue capabilities during the Gulf War.²⁸⁰ In fact, the Gulf War Air Power Survey cites a Lieutenant Colonel Trumbull, assigned to a tactical fighter squadron during the war, as saying:

Our DO [Squadron Operations Officer] and his backseater were on the ground for three and one-half days in Western Iraq. Nobody'd go pick them up, and they eventually became prisoners of war. The advertised special operations guys that came down to talk to us before the war said 'no sweat, we'll come get you anywhere you are.' That from my perspective was a big lie... When I've got guys on the ground for three and one-half days and they don't go pick them up, we basically decided at that point that if anybody went down, you were on your own. Nobody was coming to get you."²⁸¹

In addition, Major (now Colonel) Thomas E. Griffith, one of the crewmembers Lieutenant Colonel Trumbull was referring to, was also unhappy with combat search and rescue during the war. After repatriation, Major Griffith attended Air Command and Staff College, where he produced a position paper on combat search and rescue. He was clearly less than impressed with the combat search and rescue services provided by Air Force Special Operations Command, and recommended placing "the Air Rescue Service under Air Combat Command, giving it **sole responsibility** [emphasis in original] for combat search and rescue."²⁸²

²⁸⁰ US Air Force Major (now Colonel) Thomas Griffith, "Position Paper on Improved Search and Rescue" (Unpublished Research Paper, Air Command and Staff College, Maxwell Air Force Base, Alabama, 15 October 1991), 1.

²⁸¹ John F. Guilmartin, Task Force Chief, Part One, "Weapons, Tactics, and Training", *Gulf War Air Power Survey*, Volume IV, (Washington D.C.: US Government Printing Office), 302: Lieutenant Colonel Trumbull was referring to an F-15E shutdown. Although the two survivors were indeed captured, poor communications prevented contact, location authentication, and recovery efforts were the cause, not a failure to respond. In fact, three recovery attempts were made, before the two survivors walked into a border guard post.

²⁸² Griffith, 5.

Finally, US Air Force Lieutenant Colonel Victor E. Renuart, Jr. and US Army Lieutenant Colonel Bryan D. Brown produced a US Army War College paper in 1992 with a similar theme. Moreover, Lieutenant Colonels Renuart and Brown charged that “[combat search and rescue] during Desert Storm uncovered some serious flaws in the capabilities to provide CINC [sic] coverage.”²⁸³

Regrettably, many of these negative perceptions are warranted. In fact, Lieutenant Colonel Bob Hunt, who served as an MH-53J *Pave Low* pilot during the Gulf War, highlights a number of issues associated with his organization providing combat search and rescue during the war. For example, Lieutenant Colonel Hunt admits that special operations forces were less than optimally prepared for combat search and rescue duties, and had to learn and develop a capability as the war progressed.²⁸⁴ Lieutenant Colonel Hunt also wrote that had they been assigned the mission of combat search and rescue earlier, they could have developed a combat search and rescue capability. Under the assumption that Air Rescue Service would provide this service, they had not trained, organized, or equipped themselves for these types of missions.²⁸⁵



Figure 20
Gulf War Rescue. Captain Tom Trask and his Air Force Special Operations Command crew, despite not being fully prepared to accomplish conventional combat search and rescue missions, recover US Navy Lieutenant Devon Jones. Photo courtesy US Air Force.

It is important to remember, however, that Air Force Special Operations Command was employed under *Mejor Que Nada* conditions. In fact, it is likely that professionals such as Captain Trask, Lieutenant Colonel Hunt, and the Air Rescue Service crewmembers who augmented special operations were just as

²⁸³ US Air Force Lieutenant Colonel Victor E. Renuart and US Army Lieutenant Colonel Bryan D. Brown, “Combat Search and Rescue: A Search for Tomorrow” (Unpublished Research Paper, US Army War College, Carlisle Barracks, PA: April 1992), 12.

²⁸⁴ Hunt, 7.

²⁸⁵ Ibid.

frustrated with the situation as their fighter and bomber counterparts. These crewmembers were not opposed to saving lives, or “liars” as Lieutenant Colonel Trumbull alleges; rather, they were simply not trained, organized, or equipped for this mission.

Multi-Role Effectiveness

In addition to critiquing Air Force Special Operations Command's combat search and rescue capabilities during the Gulf War, skeptics may also raise doubts over multi-role effectiveness, charging that this proposal might adversely compromise the ability of both people and equipment to specialize in either combat search and rescue or special operations. In their argument, they may use the Israeli Air Force as a negative case study in multi-role effectiveness, pointing out that an average Israeli dual-use fighter squadron allocates two-thirds of their training to air superiority, and one third to air-to-ground attack.²⁸⁶ Subsequently, they may conclude that if there were two Israeli fighter squadrons, with one specializing in air superiority and the other in air-to-ground attack, then crewmembers in each unit would be more proficient in their specialized core competency. With this schema in place, they could argue for continued combat search and rescue and special operations separatism.

In a fiscally unconstrained environment, this argument would initially seem alluring. However, there are several reasons why this reasoning lacks complete plausibility. For example, history demonstrates that the fiscal environment has indeed prejudiced conventional combat search and rescue forces throughout its existence, resulting in an inconsistent capability to save downed pilots and crewmembers. As noted earlier, US leaders may desire combat search and rescue specialists, but when faced with credible threats to national security, coupled with limited dollars, they tend to shift their priorities into war-winning versus combat-supporting assets. In addition, it is important to understand that a multifaceted force would actually enhance the fiscal

²⁸⁶ Air Vice Marshal Tony Mason, *Air Power: A Centennial Approach*, (London: Brassey's, (UK) Ltd, 1994), 268.

situation, since support costs by commonalty in spare parts, maintenance, weapons, and flight testing would be reduced.

Moreover, an argument against a multifaceted organization shortchanges the tremendous flexibility such a force could provide. Separate organizations as exists today, or even specialists within flights, flights within squadrons, squadrons within wings, or even a rescue wing within a major command might constrain training requirements somewhat, but this would be at the expense of flexibility.²⁸⁷ It would be better if Joint Force Commanders could task any appropriate crewmember and airframe of a multifaceted special operations team, to execute each and every one of their principal and collateral missions--to include combat search and rescue. In addition, all of these special operations airpower assets could be used in both defensive and offensive situations, and unlike conventional combat search and rescue forces, present multiple threats to opponents.

In addition, while it is true that the Israeli Air Force is struggling with the challenges of their dual-use fighters, it is important to note that air superiority and air-to-ground attack missions are vastly different. In fact, to put this dual-use argument in context, one must recall that the 58th Special Operations Wing provides essentially the same training for both HH-60G and MH-60G *Pave Hawk* pilots bound for combat search and rescue or special operations duties, respectively.²⁸⁸ In addition, the US Air Force Weapons School also provides the same curriculum to helicopter pilots, regardless of their combat search and rescue or special operations background.²⁸⁹ Finally, one cannot ignore the fact that special operations forces have been able to safely and effectively fill 70 percent of combat search and rescue taskings worldwide.²⁹⁰ Although there is certainly a difference in combat search and

²⁸⁷ Ibid.

²⁸⁸ US Air Force Major Matt Lyons, MH-60G *Pave Hawk* Helicopter Pilot and Flight Safety Officer, 58th Special Operations Wing, Kirtland Air Force Base, New Mexico, <lyonsm@58sowgate.irk.aetc.af.mil> "Re: training", Transmitted 13 May 1999. Personal e-mail received 14 May 1999.

²⁸⁹ US Air Force Captain Michael Geragosian, HH-60G *Pave Hawk* pilot and graduate of the US Air Force Weapons School, Nellis Air Force Base, Nevada, <Geragosian.Michael@nellis.af.mil> "RE: weapons school", Transmitted 10 May 1999. Personal e-mail received 10 May 1999.

²⁹⁰ US Air Force Colonel Jim Sills briefing to General Hugh Shelton, Commander in Chief, US Special Operations Command on 28 February 1997, then General Richard Hawley, Commander, Air Combat Command on 7 May 1997.

rescue and special operations, the differences are not as radical as high altitude “dog-fighting” and air-to-ground attack missions.

Finally, one must introduce the concept of mission vulnerability into this equation. In this context, the term mission vulnerability does not refer to the tactical vulnerability of individual airpower assets, but instead to the vulnerability of mission accomplishment if resources are unable to accomplish their tasks. A multi-role airpower asset can decrease mission vulnerability, while specialized combat search and rescue assets have little effect.

To illustrate with an analogy, one might consider a P-51 *Mustang* protecting a B-17 *Flying Fortress* over Germany, during the combined bomber offensive of World War II. In this scenario, if the B-17 was shot down, the fighter might stay around to fend off some enemy attackers, but the strategic bombing mission would not be accomplished. Moreover, neither the P-51 *Mustang*, nor obviously the destroyed bomber would be able to execute a back-up strategic bombing mission. Instead, another offensive bomber would have to be tasked to re-attack the target, and thus mitigate mission vulnerability.

One could apply this scenario to modern day offensive air campaigns and combat search and rescue. However, instead of a P-51 *Mustang* dedicated to protecting a B-17 *Flying Fortress*, the analogy would involve an HH-60G *Pave Hawk* helicopter providing combat search and rescue coverage to an F-15E *Strike Eagle*. Like in the World War II analogy, if the fighter-bomber is shot down, and even if the HH-60G *Pave Hawk* rescues the crew, neither the downed F-15E *Strike Eagle* or the combat search and rescue asset would be able to conduct a second attack of the target. In this scenario, two airpower assets, not just the one F-15E *Strike Eagle* shot down, are now unable to contribute to mission effectiveness, and thus mission accomplishment is more vulnerable. The only way to execute a back-up attack, and thus salvage the mission, would be to task a third airpower asset capable of offensive operations.

Thus, one could consider how a multifaceted force, capable of both offensive operations and combat search and rescue would fit into the latter scenario. Specifically, as the crewmembers ejected from their disabled F-15E *Strike Fighter*, they would be confident that a special operations force, properly

trained, organized, and equipped to conduct combat search and rescue, would be dispatched to recover them. As this designated special operations crew pressed the rescue, however, identical airpower assets would be conducting offensive special operations missions. Moreover, and of course depending on the threat and scenario, the special operations crew who rescued these downed crewmembers could theoretically be tasked later to execute an unconventional attack against the same strategic target that downed the ill-fated F-15E *Strike Fighter*. In the end, the multi-role helicopter would have decreased overall mission vulnerability.

Figure 21

A multi-role platform. US Air Force special operations crews, with a proper organizational structure, adequate continuation training program, and more people and equipment could effectively conduct both combat search and rescue missions, as well as offer powerful offensive capabilities to Joint Force Commanders. Photo courtesy US Air Force.

Lieutenant Colonel Hunt wrote that if you ask a group of pilots what they think of US combat search and rescue capabilities, “a typical fighter pilot may respond with either accolades or reservations, depending on their involvement and interaction during Desert Storm.”²⁹¹ Therefore, It is incumbent upon Gulf War veterans with “reservations”, who have matured into US national security decision makers, to critically reassess their perception of Air Force Special Operations Command. Moreover, it is equally important that these leaders comprehend the long-term cultural issues associated with conventional combat search and rescue, as well as understand its cyclic history. Finally, these leaders must consider the cost-savings, flexibility, and contributions to mission vulnerability that a multi-role force could bring to a conflict. Armed with this current information, it is likely these leaders will appreciate the benefits associated with a multifaceted force, capable of conducting offensive special operations, as well as combat search and rescue.

²⁹¹ Hunt, 1.

Chapter 8

Conclusion

I am waiting with earnest expectation for the first time that an aeroplane actually saves a life; when that takes place, it will have conquered the heart of the people as well as fascinated its intellect, aroused its awe, or compelled its admiration.

— Glen H. Curtis
The Curtis Aviation Book

The end for which a soldier is recruited, clothed, armed, and trained, the whole object of his sleeping, eating, drinking, and marching, is simply that he should fight at the right place and the right time.

— Carl Von Clausewitz
On War

These two epigraphs illustrate the paradox US Air Force decision makers face, in regard to combat search and rescue. On one hand, combat search and rescue seems to humanize war, and thus embraces the implied need for a robust force. On the other hand, the entire concept of war emphasizes violence and lethality. In the end, history demonstrates that military leaders in the past, who focused their efforts on killing their enemies, tended to fair better than the daft, who concentrated primarily on limiting losses.

However, the US Air Force currently stands at a crossroad with respect to combat search and rescue, and evidence suggests its leaders are considering revitalizing their atrophied force. Yet, by exploring the history of national security decision making and combat search and rescue, analyzing war and airpower theories, and consulting basic doctrine, one can predict that any plan to bolster conventional combat search and rescue forces will most likely fail as before. Eventually, the transient anomaly that allows such thinking will end, probably due to a true threat to US national security, coupled with a constrained budget. When that occurs, these leaders will again refocus their efforts away from combat search and rescue, and once more toward expending their limited resources on solving the crisis.

Instead of continuing the cyclic history of combat search and rescue, national security decision makers should transfer all US Air Force search and rescue assets into Special Operations Command. Creating this robust force, in

turn, will provide an organizational structure leading to new promotion pathways to the senior ranks, so that young officers learning and practicing this way of war can rise to the top.²⁹² Unlike their Vietnam-era predecessors, these warriors will think in terms of offensive operations, principles of war, and tenets of airpower, in addition to maintaining an altruistic desire to save their downed comrades. Eventually, this generation will mature into powerful advocates for combat search and rescue, as well as special operations.

In addition, this multifaceted force will provide US leaders the offensive firepower they desire, and thus will most likely compete well in the “zero sum game” of national security budgeting. Moreover, and unlike traditional combat search and rescue, this multi-role special operations force will consistently satisfy the needs of US policy makers, and indeed will permanently flourish, regardless of transient anomalies or current issues of the day.

Finally, and most important from a personnel recovery viewpoint, US leaders will not allow such an essential force to exist in the inauspicious state which has historically characterized conventional combat search and rescue. Thus, this multifaceted force will be trained, organized, and equipped to provide combat search and rescue coverage to combatants at the start of hostilities, not a “potential” force requiring bolstering during wartime.

In the end, the frank words of US Air Force Colonel Jim Sills offer an alternative to the traditional management of combat search and rescue:

“We need capability in the Air Force today, not potential. We must be capable of saving the lives of our comrades in arms should they fall into harms way. We can't afford to potentially save them.”²⁹³

In line with this vision, a merged force will retain the capability to employ their powerful airpower assets, but similar to the Israeli Commandos, embrace a sacrosanct pact with fellow combat aviators. Thus, future combatant commanders will be able to direct their special operators to recover fallen comrades, as well as destroy enemy forces, “*Any Time, Any Place.*”²⁹⁴

Postscript

²⁹² Stephen P. Rosen, *Innovation and the Modern Military, Winning the Next War*, (Ithaca and London: Cornell University Press, 1991), 20.

²⁹³ US Air Force Colonel Jim Sills, SillsJ@Hurlburt.af.mil “RE: research update”, Transmitted 26 February 1999. Personal e-mail received 27 February 1999.

²⁹⁴ “Any Time, Any Place,” is the motto of the 16th Special Operations Wing, Hurlburt Field, Florida.

During the final compilation of this study, the North Atlantic Treaty Organization, along with the US, has engaged in a serious regional conflict within the Balkans. Specifically, US and Allied forces are presently conducting an air campaign against Yugoslavia, in an effort to aid ethnic Albanians in Kosovo.

Airmen in this conflict are certainly operating in harms way, and consequently a US Air Force F-117 *Night Hawk* has been lost.²⁹⁵ Hence, there appears to be a critical need for a viable combat search and rescue force.

However, once again US Air Force conventional combat search and rescue forces did not contiguously deploy with their combat air force counterparts, and thus were unavailable to provide combat search and rescue to this fighter pilot. Instead, *Air Force Times* reports that both MH-60G *Pave Hawk* and MH-53J *Pave Low* helicopters, assigned to Air Force Special Operations Command, successfully pressed this rescue.²⁹⁶ Thus, the predictable sine wave, dating back decades, has provided yet again a *Mejor Que Nada* combat search and rescue arrangement at the commencement of hostilities.

²⁹⁵ John Pulley, "Daring Rescue Leaves Lingering Questions", *Air Force Times*, 12 April 1999, 13.

²⁹⁶ Ibid.

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